

CHAPTER 2

COMPREHENSIVE NEEDS ASSESSMENT



The Comprehensive Housing Needs Assessment is meant to analyze existing and projected housing demand against existing and projected housing supply, including the resources available to the town and the constraints facing the town. It guides the creation of the rest of the plan.

This Comprehensive Needs Assessment has six sections:

1. The **Demographic Analysis** illuminates the current and projected housing needs of the population considering regional growth factors and includes information on household type and size, age of the population, income, and other demographic factors.
2. A description of the amount, type, and cost of the **Existing Housing Inventory** includes the existing and projected market-rate and affordable housing.
3. The **Housing Cost Burden Analysis** compares the income of residents and the cost of housing to determine the affordability gap of the community—in other words, analyzing whether the supply meets the demand.
4. The description of existing **Affordable Housing Efforts** includes a list of resources that may be called upon for housing development, setting a baseline for improvement if necessary.
5. The **Development Constraints and Limitations** section analyzes what may limit housing production in order to identify issues that can and should be mitigated.
6. Finally, the **Comprehensive Needs Assessment Conclusions** section ties everything together, summarizing the challenges and opportunities the HPP should address.



DEMOGRAPHIC ANALYSIS

This section provides an overview of the demographic changes that have occurred in Pepperell since the publication of the *Pepperell Housing Production Plan for 2021-2025*. Its goal is to understand how the population characteristics have changed over the past decade and project future growth rates. This helps define the housing need in Pepperell.

POPULATION GROWTH

Understanding population trends is essential for shaping an effective Housing Production Plan (HPP).

Table 1 outlines Pepperell's past, current, and projected population from 2010 to 2040, highlighting modest growth followed by a potential population decline in the long term.

Between 2010 and 2020, Pepperell experienced moderate population growth, increasing from 11,559 to 12,196 residents, a growth rate of 5.51%. This increase suggests a relatively stable community with a healthy rate of change that may reflect natural growth, limited new housing development, or a mild increase in in-migration.

Looking ahead, from 2020 to 2030, the population is projected to grow slightly to 12,423, a 1.86% increase. Then, between 2030 and 2040, growth slows considerably to just 0.76%, reaching 12,517. This long-term trend signals a plateau in population, which is consistent with broader regional demographic patterns of aging populations, smaller household sizes, and limited new housing construction in suburban and semi-rural communities like Pepperell.

FAST FACTS: DEMOGRAPHICS

- **Population growth is slowing and approaching a long-term plateau, but housing demand remains high.** Pepperell has experienced steady but modest population growth (5.5% from 2010-20) with projections showing slower increases through 2040. However, as households grow smaller, more units are required to house a stable population.
- **Pepperell's population is aging rapidly, with seniors becoming a dominant housing group and the Town does not have the accessible housing stock to support this demand.** Significant growth in older age groups (60–74 and 75+), while younger cohorts (0–19 and 35–44) have declined.
- **Household composition is diversifying, increasing demand for nontraditional and flexible housing.** Nontraditional households, including single-parent and single-person households, have grown significantly. Average household size has decreased from 2.89 in 2000 to 2.69.
- **The Town has challenges retaining younger residents and families, while accessibility needs are growing.** Declines in younger adult cohorts and school-age populations suggest barriers to attracting and retaining younger households. At the same time, 12.6% of residents live with a disability reinforcing the importance of accessible, adaptable, and inclusive housing design.



Table 1: Pepperell Population, 2010-2020 (2030-2050 Projection)

Year	Population	Growth Rate
2010	11,559	
2020	12,196	5.51%
2030*	12,423	1.86%
2040*	12,517	0.76%

Source: U.S. Census Bureau, 2000, 2010, and 2020 Decennial Census. * Indicates projections developed by MassDOT and UMass Donahue Institute with input from NMCOG

HOUSEHOLDS SIZES AND TYPES

Although population growth in Pepperell is projected to slow, housing demand is expected to remain strong because the number of households continues to increase. This reflects a statewide trend toward smaller households, including seniors aging in place; single-person households; smaller family sizes; and delayed marriage and childbearing. State projections indicate that household growth will continue even under low population growth scenarios, reinforcing the need to expand housing supply even in communities experiencing modest population change.

As household sizes decrease, more households represent the same population, meaning household growth often outpaces population growth. This was true of Pepperell, which experienced steady household growth, increasing from 3,847 households in 2000 to 4,431 in 2020 (15.2%). While the growth rate slowed over time, the town's number of households continued to rise, reflecting a stable demand for housing. **Table 2** illustrates this growth as well as future projected household figures. In comparison, the Greater Lowell region experienced 17% growth over the same period, outpacing Pepperell in the most recent decade.

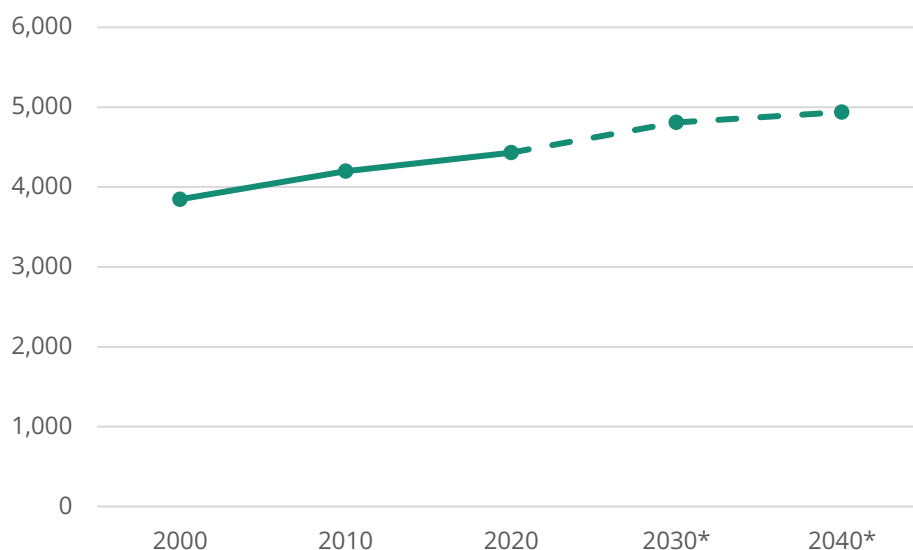
Looking ahead, the number of households in Pepperell is projected to increase through 2040, reaching a peak of 4,938, an 11.4% rise from 2020. This is similar to regional patterns, indicating broader demographic and economic trends that may influence housing demand. As Pepperell continues to represent a small but steady portion of the regional housing market, it can contribute meaningfully to regional housing goals by encouraging a mix of affordable and market-rate housing that supports long-term sustainability and inclusivity.

Table 2: Number of Households and Growth, Pepperell (2000-2020, 2030-2050 Projection)

Year	Pepperell Households	Growth Rate	Greater Lowell Region Households	Growth Rate	Pepperell Households as % of the Region
2000	3,847	15.9%	99,342	10.2%	3.9%
2010	4,197	9.1%	104,022	4.7%	4.0%
2020	4,431	5.6%	116,271	11.8%	3.8%
2030*	4,809	8.5%	122,509	5.4%	3.9%
2040*	4,938	2.7%	125,842	2.7%	3.9%



Figure 1: Number of Households, Pepperell (2000-2020, 2030-2040 Projection)



Source: U.S. Census Bureau, 2000, 2010, and 2020 Decennial Census. * and dashed lines indicates projections developed by MassDOT and UMass Donahue Institute with input from NMCOG.

Average household size in Pepperell has gradually declined over the past two decades, mirroring regional trends in Greater Lowell, as shown in **Table 3**. In 2000, Pepperell households averaged 2.89 persons, slightly above the regional figure of 2.77. By 2010, this figure had decreased to 2.74, and in the most recent 2019–2023 estimates, the average fell further to 2.69, remaining just above the Greater Lowell average of 2.67. This steady decrease reflects broader demographic shifts, including aging households, fewer children per family, and an increase in smaller household types such as singles and couples without children. For Pepperell, the trend suggests a growing demand for diverse housing options that can accommodate smaller household sizes, such as townhomes, accessory dwelling units, and smaller single-family or multifamily units, while still maintaining opportunities for family-sized housing to support long-term community viability.

Table 3: Average Household Size in Pepperell and Greater Lowell (2000, 2010, and 2019-2023)

Year	Pepperell	Greater Lowell
2000	2.89	2.77
2010	2.74	2.70
2019-2023	2.69	2.67

Source: U.S. Census Bureau, 2000, 2010 Decennial Census and 2019-2023 American Community Survey

Table 4 analyses how the size of family and nonfamily households in Pepperell has changed in recent years. Between 2010 and the 2019–2023 period, Pepperell experienced a modest shift in household size distribution, reflecting broader demographic trends such as aging populations, delayed family formation, and changing living preferences. This growth was accompanied by subtle but noteworthy changes in household composition.

One of the most significant changes is the increase in one-person households, which rose from 850 in 2010 to 975 in the most recent period, growing from 20% to 23% of all households. This trend suggests a growing demand for smaller housing units, possibly due to an aging population living alone, more young adults forming independent households, or individuals choosing to live solo. Nonfamily households, which are mostly composed of single individuals, also increased from 1,081 to 1,236, indicating the continued importance of providing diverse housing options.

Among family households, the majority continue to consist of two to four people, with little change in their proportional representation. Two-person family households increased slightly in both number and share (from 1,122 to 1,164, rising from 36% to 38%), while larger family households of five or more people declined in absolute numbers and proportion from 464 households (15% of all family households) in 2010 to 430 (14%) in 2019–2023. This shift reflects a trend toward smaller family sizes, consistent with regional and national patterns.

Overall, these changes suggest that while family households continue to dominate in Pepperell, there is a growing need for smaller, more flexible housing options to accommodate singles, older adults, and smaller households. At the same time, the town should retain some capacity for larger homes to ensure housing needs are met for all household types. As Pepperell plans for future housing needs, ensuring a balanced mix of unit sizes will be essential to supporting a diverse and evolving community.

Table 4: Pepperell Household Size by Number of People (2010 and 2019-23)

Household Type	Household Size by Number of People: 2010							
	1	2	3	4	5	6	7+	Total
Family Household	0	1,122	786	744	313	94	57	3,116
Percentage	0%	36%	25%	24%	10%	3%	2%	100%
Nonfamily Household	850	207	16	7	1	0	0	1,081
Percentage	79%	19%	1%	1%	0%	0%	0%	100%
TOTAL	850	1,329	802	751	314	94	57	4,197
Percentage	20%	32%	19%	18%	7%	2%	1%	100%
Household Type	Household Size by Number of People: 2019-23							
	1	2	3	4	5	6	7+	Total
Family Household	0	1164	759	724	258	84	88	3,077
Percentage	0%	38%	25%	24%	8%	3%	3%	100%
Nonfamily Household	975	235	21	0	5	0	0	1,236
Percentage	79%	19%	2%	0%	0%	0%	0%	100%
TOTAL	975	1,399	780	724	263	84	88	4,313
Percentage	23%	32%	18%	17%	6%	2%	2%	100%

Source: U.S. Census Bureau, 2010 Decennial Census Table P28 and 2019-2023 American Community Survey Table B11016.



Analysis of household age composition trends in Pepperell from 2000 to the 2019–2023 period, as shown in **Table 5**, reveals a clear and steady aging of the town’s population. Over the past two decades, the proportion of households headed by residents aged 65 and older has more than doubled, rising from 13% of all households in 2000 to 28% in the most recent data. This shift is particularly pronounced among nonfamily households, where seniors now comprise nearly half (47%) of all nonfamily householders, up from just 29% in 2000. Meanwhile, the share of households headed by residents aged 35 to 64, traditionally the core working-age population, has declined from 68% to 61%, while younger householders aged 15 to 34 have remained relatively flat at around 10–11%. The growing number of older residents living alone or in nonfamily households signals an increasing demand for accessible, smaller, and affordable housing options suited to aging in place. These demographic trends underscore the importance of incorporating age-friendly housing strategies into Pepperell’s housing production plan to address the evolving needs of its residents.

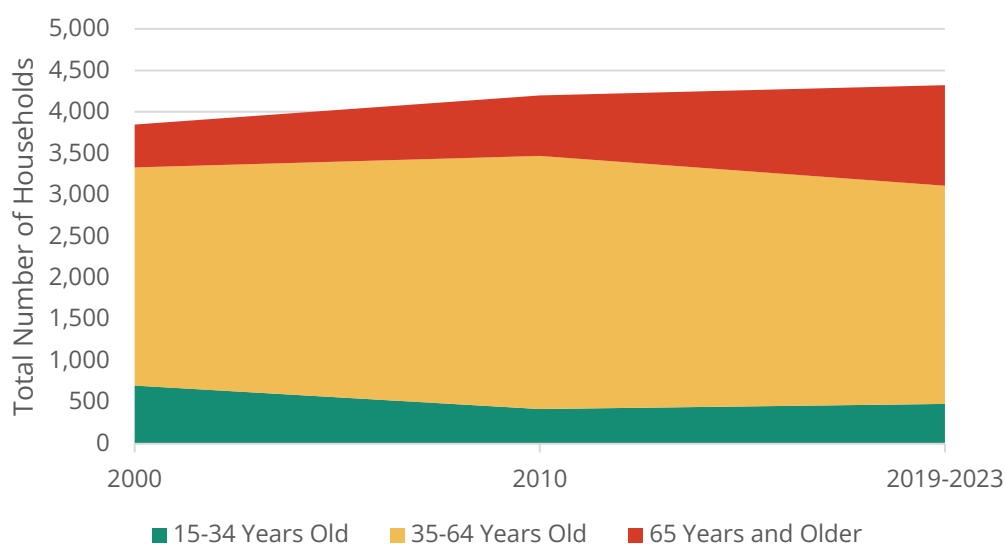
Table 5: Pepperell Head of Household by Age: (2000, 2010, 2019-23)

	2000		2010		2019-23	
	Number	Percent	Number	Percent	Number	Percent
Family Households						
15-34 Years Old	547	18%	273	9%	274	9%
35-64 Years Old	2,195	73%	2,438	78%	2,177	71%
65 Years and Older	274	9%	405	13%	635	21%
Total Family	3,016	100%	3,116	100%	3,077	100%
Nonfamily Households						
15-34 Years Old	155	19%	146	14%	207	17%
35-64 Years Old	435	52%	613	57%	452	37%
65 Years and Older	241	29%	322	29%	577	47%
Total Nonfamily	831	100%	1,081	100%	1,236	100%
Total Households						
15-34 Years Old	702	18%	419	10%	481	11%
35-64 Years Old	2,630	68%	3,051	73%	2,629	61%
65 Years and Older	515	13%	727	17%	1,212	28%
Total Households	3,847	100.0%	4,197	100%	4,313	100%

Source: U.S. Census Bureau, 2010 Decennial Census Table P28 and 2019-2023 American Community Survey



Figure 2: Head of Household Age Distribution, All Households (2000, 2010, 2020)



Source: U.S. Census Bureau, 2000, 2010 Decennial Census Table P28 and 2019-2023 American Community Survey

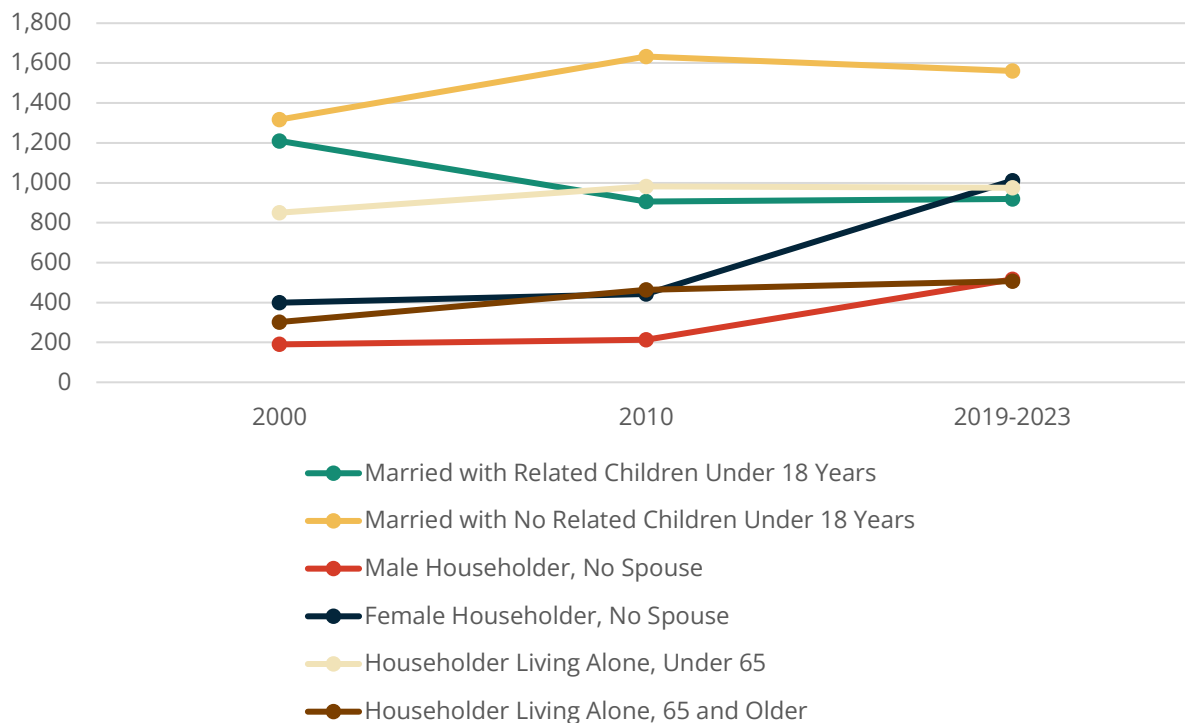
An analysis of household types in Pepperell over the past two decades, as shown in **Table 6** highlights a diversification of household structures and a growing demand for varied housing options. While married-couple families have remained a consistent majority, comprising around 79–81% of all family households, the composition within this group has shifted. The proportion of married couples without children under 18 has increased from 52% in 2000 to 63% in the 2019–2023 period, reflecting broader aging trends and potentially declining birth rates. Meanwhile, nontraditional family households have grown significantly, with male householders without a spouse increasing from 6% to 17%, and female householders without a spouse rising from 13% to 33%. Nonfamily households now make up nearly 29% of all households, with more than half of those aged 65 and older living alone—up from 36% in 2000 to 52% today.

State projections indicate that a significant share of new households through 2035 will be headed by residents over age 65. This shift will increase demand for: accessible housing; single-floor living; smaller homes; increased rental housing options; and supportive housing and service-enriched environments. Across Massachusetts, households headed by older adults are among the fastest growing segments of housing demand. Pepperell's projected growth in residents aged 60 and older suggests a need to proactively plan for downsizing opportunities that allow residents to remain in the community.

Table 6: Pepperell Household Types (2000, 2010, 2019-23))

Household Type	2000		2010		2019-23	
	Number	Percent	Number	Percent	Number	Percent
Family Households						
Married - couple	2,527	81%	2,539	79%	2,480	81%
With related children under 18 years	1,210	48%	906	36%	919	37%
No related children under 18 years	1,317	52%	1,633	64%	1,561	63%
Male householder, no spouse	190	6%	213	7%	516	17%
Female householder, no spouse	399	13%	443	14%	1,011	33%
Total Family Households	3,116	74%	3,195	72%	3,077	71%
Nonfamily Households						
Householder living alone	850	79%	982	79%	975	79%
Householders 65 & older living alone	302	36%	463	37%	507	52%
Householder living with others	231	21%	254	21%	261	21%
Total Nonfamily Households	1,081	26%	1,236	28%	1,236	29%
Total Households	4,197	100%	4,431	100%	4,313	100%

Figure 3: Pepperell Household Characteristics (2000, 2010, 2019-2023)



Source: U.S. Census Bureau, 2000, 2010 Decennial Census Table P28 and 2019-2023 American Community Survey



AGE COHORTS

Reviewing Pepperell's population by age cohort, in **Table 7** from 2000 to the 2019–2023 period reveals a significant demographic shift toward an older population. The number of residents aged 60 to 74 increased dramatically—by 236%—from just 773 in 2000 to 2,600 in 2023, while those aged 75 and older also rose by 17%. In contrast, younger age groups experienced declines: the 0–9 and 10–19 cohorts decreased by 30% and 17% respectively, and the 35–44 cohort—once the largest—dropped by 41%. Although the 25–34 age group rebounded slightly with a 9% increase since 2000, these changes point to an aging population and fewer families with school-age children. The 45–59 group peaked in 2010 and has since declined, suggesting a continuing aging trend without equivalent generational replacement. These patterns underscore the need for age-friendly housing options, such as downsized or accessible units for older adults, as well as strategies to attract and retain younger families and workers. Addressing this demographic shift will be critical to ensuring long-term community sustainability and balanced housing development in Pepperell.

Table 7: Pepperell Population by Age Cohort (2000, 2010, 2020)

Age Group	2000		2010		2019-23		% +/- 2000 - 2019-23
	Number	Percent	Number	Percent	Number	Percent	
0-9 years	1,888	17%	1,376	12%	1,328	11%	-30%
10-19 years	1,800	16%	1,830	16%	1,489	13%	-17%
20-24 years	406	4%	638	6%	418	4%	3%
25-34 years	1,423	13%	953	8%	1,551	13%	9%
35-44 years	2,259	20%	1,601	14%	1,330	11%	-41%
45-59 years	2,240	20%	3,235	28%	2,526	22%	13%
60-74 years	773	7%	1,392	12%	2,600	22%	236%
75+ years	353	3%	472	4%	414	4%	17%
Total Population	11,142	100%	11,497	100%	11,656	100%	5%

Source: U.S. Census Bureau, 2000, 2010 Decennial Census Table P28 and 2019-2023 American Community Survey

Table 8 shows the projected change for each age cohort, assuming current conditions continue. Between 2020 and 2040, Pepperell's population is projected to remain relatively stable in total size, but the age distribution is expected to shift significantly. The most notable demographic change is the substantial growth in the senior population, particularly those aged 75 and older, which is projected to double to 1,198 by 2040. This dramatic increase will expand this age group's share of the total population from 5% to 10%, underscoring the need for age-friendly housing, supportive services, and accessible community amenities.

Other older age groups are also expected to experience modest growth, with residents aged 45–59 and 60–74 each increasing by about 3%. In contrast, younger adult cohorts are projected to decline. The 20–24 age group is anticipated to shrink by 27%, and the 25–34 group by 18%, suggesting potential challenges in retaining or attracting younger residents. This trend could be linked to



housing affordability constraints, limited starter-home availability, or economic factors influencing migration patterns.

School-age populations are expected to fluctuate over the next two decades. However, the 35–44 age group, often associated with households raising young children, is projected to grow by 14%, which could help offset some of the declines in younger cohorts and sustain demand for family-oriented housing.

Overall, these projections point to an aging population, a potential shortage of younger working-age residents, and a gradual shift in community needs. Pepperell's housing strategies will need to address this evolving demographic model by supporting both the growing senior population and efforts to attract and retain younger households to maintain a balanced, vibrant community.

Table 8: Pepperell Age Cohort Projected Changes (2020-2040)

Age Groups	2020	2020 %	2030	2030 %	2040	2040 %	Change 2020-2040	Change %
0-9 years	1,332	11%	1,451	12%	1,291	10%	-41	-3%
10-19 years	1,718	14%	1,469	12%	1,588	13%	-130	-8%
20-24 years	758	6%	567	5%	552	4%	-206	-27%
25-34 years	1,329	11%	1,272	10%	1,089	9%	-240	-18%
35-44 years	1,505	12%	1,826	15%	1,709	14%	204	14%
45-59 years	3,028	25%	2,732	22%	3,113	25%	85	3%
60-74 years	1,927	16%	2,235	18%	1,977	16%	50	3%
75+ years	599	5%	871	7%	1,198	10%	599	100%
Total	12,196	100%	12,423	100%	12,517	100%	321	3%

Source: UMass Lowell Donahue Institute

PEOPLE WITH DISABILITIES

According to **Table 9**, an estimated 1,466 Pepperell residents, approximately 12.6% of the town's population, are living with one or more disabilities. The largest share of individuals with disabilities is in the 18–64 age group, which accounts for 824 people or 7.1% of all residents, followed by 412 residents aged 65 and older (3.5%). Children and youth tend to be a smaller proportion of those with disabilities, with 230 individuals aged 5–17 (2.0%) reporting a disability, and no reported cases among children under 5 years old. Disabilities in Pepperell take a variety of forms, with hearing (4.3%) and vision difficulties (4.6%) being the most common, followed by cognitive difficulties (4.2%) and ambulatory limitations (3.1%). A smaller proportion of residents report self-care difficulties (1.4%) or independent living challenges (3.0%). Because individuals may experience multiple types of disabilities, the total percentages by type exceed the share of residents with any disability. These figures highlight the importance of ensuring that housing in Pepperell is accessible, adaptable, and supportive of residents with diverse needs across all age groups, particularly working-age adults and older residents who make up the largest share of those with disabilities.



Table 9: Pepperell Population Living with Disabilities (2019-2023)

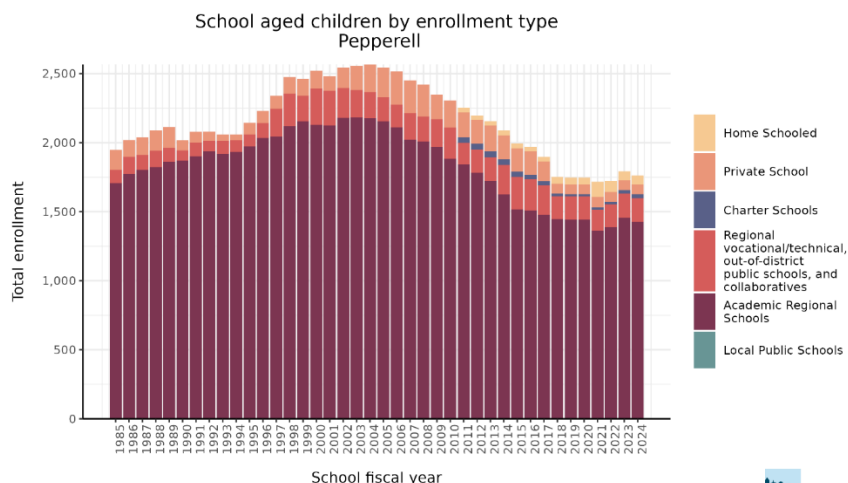
Age Group and Disability Status	Number	% Total Residents
Under 5 years old	0	0.0%
5-17 years old	230	2.0%
18-64 years old	824	7.1%
65+ years old	412	3.5%
Total Number of Residents with a Disability	1,466	12.6%
With a hearing difficulty (all ages)	505	4.3%
With a vision difficulty (all ages)	541	4.6%
With a cognitive difficulty (all ages)	484	4.2%
With an ambulatory difficulty (all ages)	359	3.1%
With a self-care difficulty (all ages)	166	1.4%
With an independent living difficulty (all ages)	354	3.0%

Source: U.S. Census Bureau, 2019-2023 American Community Survey. Residents may report more than one disability.

SCHOOL ENROLLMENT

Enrollment data from the Massachusetts Department of Elementary and Secondary Education show that Pepperell's total school-aged population grew steadily from 1,948 students in FY1985 to a peak of 2,567 students in FY2004, reflecting strong residential growth during the 1990s and early 2000s. Since that peak, enrollment has generally declined, reaching 1,748 students in FY2019 and stabilizing between approximately 1,700 and 1,800 students through FY2024 (1,761 students in FY2024). Home schooling, which was negligible prior to FY2011, rose notably during the COVID-19 period (peaking at 110 students in FY2021) before declining to 65 students in FY2024. **Figure 3** illustrates a long-term post-2004 contraction in school-aged population, with modest recent stabilization and limited shifts toward alternative enrollment options.

Figure 3 School Aged Children by Enrollment Type



Source: Massachusetts Department of Elementary and Secondary Education



INCOME ANALYSIS

Change in Household Income

Pepperell's median household income from 2010–2014 to 2019–2023, after adjusting for inflation to 2023 dollars,¹ experienced a slight overall decline of 0.4%, falling from \$127,438 to \$126,976. This contrasts sharply with trends at the state and national levels, where incomes rose by 16.7% and 14.7%, respectively, over the same period. While Pepperell's median household income remained consistently well above both the Massachusetts and U.S. averages throughout the decade, the gap has narrowed as state and national incomes have grown steadily while Pepperell's has stagnated and, in recent years, declined. Pepperell's median income peaked during the 2015–2019 period at \$147,745 before beginning a downward trend, suggesting possible shifts in the town's economic base, demographic composition, or employment patterns. In comparison, Massachusetts' median household income increased each period, surpassing \$100,000 in 2016–2020 and reaching \$101,341 by 2019–2023. The United States as a whole also saw steady gains, reaching \$78,538 in the most recent period. This relative stagnation in Pepperell's income levels, despite remaining high overall, may have implications for housing affordability, economic resilience, and the town's ability to attract and retain higher-income households in the future.

Housing affordability challenges in Pepperell reflect broader statewide trends in which housing costs have risen faster than incomes. The statewide housing plan identifies constrained

FAST FACTS: INCOME

- **Pepperell has a high median income, but when adjusting for inflation, it is not growing, meaning there is an additional squeeze on renters and more need for affordable housing.** Pepperell's median household income remains high but declined slightly over the past decade, while state and national incomes rose by 15–17%.
- **Median household income peaked mid-decade and has trended downward since, which may be affected by more residents reaching retirement age.** Pepperell's adjusted median income peaked in the 2015–2019 period before declining sharply.
- **Poverty affects a meaningful share of residents, especially working-age adults and families, meaning there is a need for deeper affordable units.** About 7% of residents live in poverty, with higher shares among adults aged 25–34 and 55–64.
- **Income growth at the top masks affordability pressures after accounting for inflation.** The proportion earning \$200K + grew even as inflation-adjusted median income shrank, suggesting growing challenges for younger households, first-time buyers, and workforce households.
- **Income growth has not kept pace with inflation and the housing market rates.** The cumulative inflation rate was approximately 77%, meaning prices in 2023 are about 1.77 times higher than in 2000.

¹ Adjustments were made with the Bureau of Labor Statistics (BLS) Inflation Rate Calculator, which uses the average Consumer Price Index (CPI) for a given calendar year.



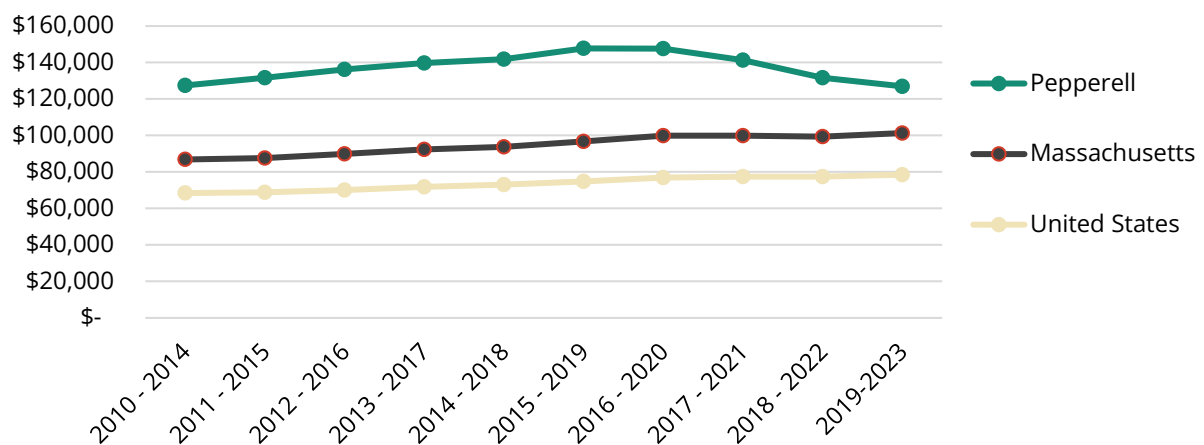
supply as a primary factor driving price escalation across Massachusetts housing markets.

These conditions particularly affect first-time homebuyers, moderate-income households, renters, older adults on fixed incomes, and those households earning below 80% area median income. As housing prices rise across Eastern Massachusetts, demand has increasingly shifted to communities like Pepperell where homes may remain relatively more attainable.

Table 10: Median Household Income in 2023 Dollars, Pepperell, Massachusetts, and the United States (2010-2014 through 2019-2023)

Years	Pepperell	Massachusetts	United States
2010-2014	\$127,438	\$86,851	\$68,464
2011-2015	\$131,637	\$87,663	\$68,901
2012-2016	\$136,183	\$89,822	\$70,033
2013-2017	\$139,688	\$92,384	\$71,813
2014-2018	\$141,844	\$93,691	\$73,004
2015-2019	\$147,745	\$96,740	\$74,856
2016-2020	\$147,608	\$99,873	\$76,923
2017-2021	\$141,298	\$99,975	\$77,510
2018-2022	\$131,744	\$99,371	\$77,381
2019-2023	\$126,976	\$101,341	\$78,538
10-year change	-0.4%	16.7%	14.7%

Figure 4: Median Household Income in 2023 Dollars, Pepperell, Massachusetts, and the United States (2010-2014 through 2019-2023)



Source: U.S. Census Bureau, 2010-2014 – 2019-2023 American Community Survey.

Household Income Distribution

As shown in **Table 11** and **Figure 5**, between 2000 and 2019–2023, Pepperell saw a clear transformation in its household income distribution. Before adjusting for inflation, the share of households earning under \$50,000 dropped from 36% in 2000 to just 17%. Simultaneously,



households with incomes of \$150,000–\$199,999 jumped by 300%, and those earning \$200,000 or more surged by a staggering 649%, escalating from just 4% to 27% of the population.

However, inflation tells another part of the story. Over this period, the cumulative inflation rate was approximately 77%, meaning prices in 2023 are about 1.77 times higher than in 2000. This means that \$100,000 in 2000 is roughly equivalent to \$177,000 in 2023 dollars. Applying this measure, many households positioned in higher nominal income brackets today may have only kept pace with—or only slightly outpaced—inflation, rather than truly increasing their purchasing power.

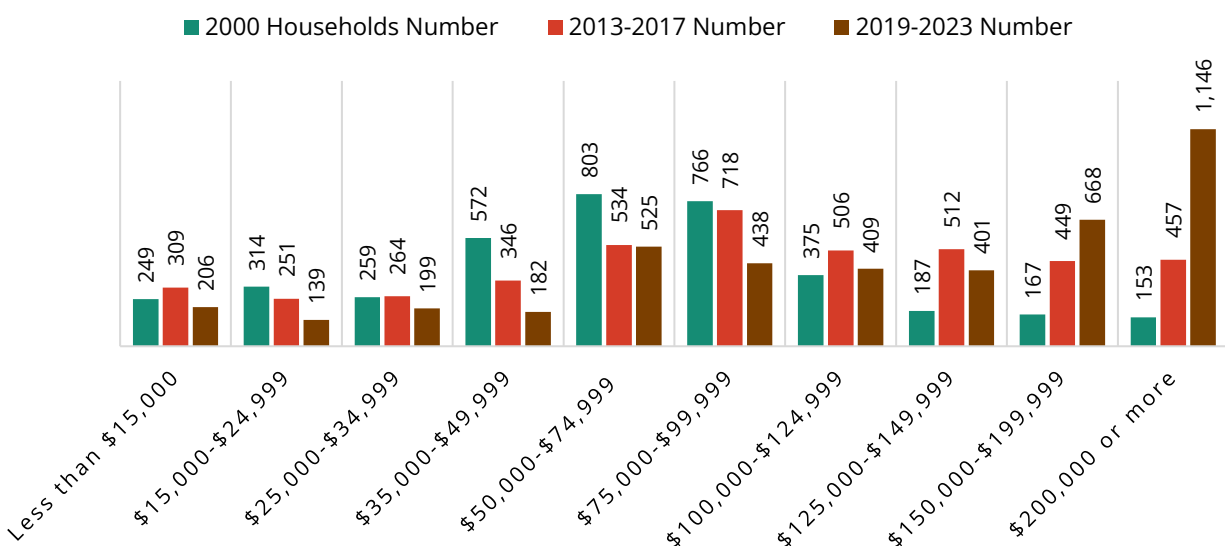
Once adjusted for inflation, the large gains in top income brackets likely reflect both real economic growth and demographic shifts, such as older or equity-rich homeowners. Meanwhile, the decline in lower to middle-income households signals a relative contraction of affordability, a trend that may affect younger or modest-income families more deeply.

Table 11: Pepperell Household Income Over Time (2000, 2013-2017, 2019-2023)

	2000		2013-2017		2019-2023		Change 2000 – 2019-23
	Households Number	Percent	Households Number	Percent	Households Number	Percent	
Less than \$15,000	249	6%	309	7%	206	5%	-17%
\$15,000-\$24,999	314	8%	251	6%	139	3%	-56%
\$25,000-\$34,999	259	7%	264	6%	199	5%	-23%
\$35,000-\$49,999	572	15%	346	8%	182	4%	-68%
\$50,000-\$74,999	803	21%	534	12%	525	12%	-35%
\$75,000-\$99,999	766	20%	718	17%	438	10%	-43%
\$100,000-\$124,999	375	10%	506	12%	409	9%	9%
\$125,000-\$149,999	187	5%	512	12%	401	9%	114%
\$150,000-\$199,999	167	4%	449	10%	668	15%	300%
\$200,000 or more	153	4%	457	11%	1,146	27%	649%
Total	3,845	100%	4,346	100%	4,313	100%	12%



Figure 5: Pepperell Household Income Over Time (2000, 2013-2017, 2019-2023)



Source: U.S. Census Bureau, 2000, 2013-2017, and 2019-2023 American Community Survey.

Area Median Income

Most affordable housing programs determine household eligibility for income restricted units on a standardized set of income thresholds. Given the economic diversity of the United States, the U.S. Department of Housing and Urban Development (HUD) defines these thresholds as percentages of Area Median Income (AMI). The AMI thresholds are primarily capped at 80%, 60%, 50%, and 30%, but vary based on household size, and used to determine eligibility for income-restricted units, including those developed under programs or statutes such as Chapter 40B, Section 8, and the Low-Income Housing Tax Credit. See section titled **Error! Reference source not found.**, in the introduction, for more information.

Table 12: Greater Lowell Income Limits by Household Size FY 2025

Area Median Income	Income Limit Category	Household Size (Number of People)							
		1	2	3	4	5	6	7	8
\$136,900	Extremely Low	\$28,750	\$32,850	\$36,950	\$41,050	\$44,350	\$47,650	\$50,950	\$54,200
	50% Very Low	\$47,950	\$54,800	\$61,650	\$68,450	\$73,950	\$79,450	\$84,900	\$90,400
	80% Low	\$73,200	\$83,650	\$94,100	\$104,550	\$112,950	\$121,300	\$129,650	\$138,050

Source: U.S. Department of Housing and Urban Development, May 2025. Pepperell is included in the Lowell Metropolitan Fair Market Rent (FMR) region.

Poverty Status

The U.S. Census Bureau uses a complex "Poverty Threshold" calculation to estimate the population's poverty levels which considers money before taxes and does not include capital gains or benefits such as public housing, Medicaid, and food assistance. In 2025, these thresholds ranged from roughly a \$15,650 household income for one person in family to roughly \$54,150 for eight or more.



Table 13 shows that between 2019 and 2023, an estimated 759 Pepperell residents, representing about 7% of the town's population for whom poverty status was known, were living below the federal poverty line. Poverty affected all age groups to varying degrees, with the largest share among residents aged 55 to 64 years, who accounted for 19% of those in poverty, followed closely by adults aged 25 to 34 years at 18%. Young adults aged 18 to 24 years made up 13% of those in poverty, while children under 18 collectively represented about 21% of the population in poverty, indicating that economic hardship affects a notable portion of families with children. In contrast, residents aged 75 years and older reported no poverty, which may reflect stable retirement incomes or housing stability in that age group. From a gender perspective, women made up a larger share of those in poverty at 56.5%, compared to 43.5% for men, suggesting that economic vulnerabilities disproportionately impact female residents. These findings underscore the importance of housing and social support strategies that target both working-age adults and families, while also addressing gender disparities in economic stability.

Table 13: Individuals Living in Poverty in Pepperell by Age and Sex (2019-2023)

Age	# Below Poverty Level	% of Those in Poverty
5 Years and under	50	7%
6 to 11 Years	53	7%
12 to 17 Years	55	7%
18 to 24 Years	96	13%
25 to 34 Years	139	18%
35 to 44 Years	36	5%
45 to 54 Years	93	12%
55 to 64 Years	148	19%
65 to 74 Years	89	12%
75 Years and Over	0	0%
Total Individuals with Income in the Past 12 Months Below Poverty Line	759	7%
Sex	# Below Poverty Level	% of Those in Poverty
Male	330	43.5%
Female	429	56.5%
Total	# Below Poverty Level	% of Total Population
Total Individuals with Income in the Past 12 Months Below Poverty Line	759	7%
Total Pepperell Population of which Poverty Status is Known		11,554

Source: U.S. Census Bureau, 2018-2022 American Community Survey.



RACE AND ETHNICITY ANALYSIS

Race and Ethnicity and Income

Between 2000 and 2019–2023, Pepperell experienced modest overall population growth of 4%, increasing from 11,142 to 11,616 residents. However, the town's racial and ethnic composition shifted significantly over this period, reflecting growing diversity, as illustrated in **Table 14**. The White alone population declined by 7% and now comprises 86.55% of residents, down from over 97% in 2000. In contrast, several minority groups saw substantial growth. The Asian alone population increased by 724%, rising from 80 to 659 residents and now representing 5.67% of the total population. The Black or African American alone population also grew sharply, from 52 to 304 residents, a 485% increase, now accounting for 2.62% of residents. The share of residents identifying with two or more races more than tripled, increasing by 307% to represent 4.66% of the population. The Hispanic or Latino population, which cuts across all racial categories, also more than doubled, rising from 1.02% to 3.47% of residents, a 254% increase. These demographic shifts indicate that Pepperell, while still predominantly White, has become notably more racially and ethnically diverse over the past two decades, an important consideration for housing production planning, as the Town may need to ensure housing types, locations, and price points are inclusive and responsive to a more varied population.

FAST FACTS: RACE AND ETHNICITY

- **Pepperell has become significantly more racially and ethnically diverse despite modest population growth.** While Pepperell's total population grew by just 4% since 2000, the racial and ethnic composition changed substantially, but these groups still represent small shares of the total population.
- **Income levels vary by race and ethnicity, but affordability challenges exist across all groups.** This underscores that housing affordability is a townwide issue rather than one confined to specific populations.
- **Limited rental and diverse housing options may constrain future diversity and inclusion and may disproportionately limit entry into the community.** Expanding rental housing, smaller units, and attainable ownership opportunities will be important to ensure Pepperell remains accessible and welcoming to a more diverse population over time.



Table 14: Pepperell Population Change by Race and Ethnicity (2000 - 2019-2023)

Racial/Ethnic Category	2000		2010		2019-23		+/- % 2000 - 2019-23
	Population	Percent	Population	Percent	Population	Percent	
White Alone	10,826	97.16%	11,082	96.39%	10,054	86.55%	-7%
Black or African American Alone	52	0.47%	60	0.52%	304	2.62%	485%
American Indian and Alaska Native Alone	14	0.13%	20	0.17%	-	0.00%	-100%
Asian Alone	80	0.72%	134	1.17%	659	5.67%	724%
Native Hawaiian and Other Pacific Islander Alone	-	0.00%	2	0.02%	-	0.00%	-100%
Some Other Race Alone	37	0.33%	41	0.36%	58	0.50%	57%
Two or More Races	133	1.19%	158	1.37%	541	4.66%	307%
Total Population	11,142	100%	11,497	100%	11,616	100%	4%
Hispanic or Latino (All races)	114	1.02%	194	1.69%	403	3.47%	254%

Source: U.S. Census Bureau, 2000, 2010, and 2019-2023 American Community Survey.

The income distribution by race and ethnicity in Pepperell between 2019 and 2023 (see **Table 15**) shows notable disparities that have implications for housing production and affordability planning. White, non-Hispanic households make up the overwhelming majority of heads of households, with the largest share concentrated in the highest income brackets; 26.7% earning \$200,000 or more and 13.6% earning between \$150,000 and \$199,999. However, there are also substantial numbers of White households in lower income categories, including 4.0% earning less than \$10,000 and 2.7% earning between \$20,000 and \$24,999, indicating that poverty and housing affordability challenges.

Black or African American households are relatively few in number but are heavily represented in the higher income ranges, with 42.1% earning \$200,000 or more, though smaller shares also fall in mid-income categories such as \$75,000 to \$99,999 (15.8%). Asian households display a divided income pattern, with the largest share (45.7%) earning between \$150,000 and \$199,999 and another 36.2% earning \$200,000 or more, while a small but notable group (13.4%) earn between \$25,000 and \$29,999. Households identifying as some other race or two or more races show significant representation in the \$125,000 to \$149,999 bracket (35.2%) and \$150,000 to \$199,999 bracket (52.8%), but also include 9.3% earning less than \$10,000. Hispanic or Latino households are most concentrated in the \$150,000 to \$199,999 bracket (53.3%), though 14.7% earn between \$75,000 and \$99,999 and smaller shares are spread across mid-to-lower income categories.



These patterns indicate that while Pepperell's minority households include many high-income earners, there are also vulnerable segments across all racial and ethnic groups who may face housing cost burdens, underscoring the need for diverse housing options that address both affordability and market-rate demand. In addition, this might indicate that while families who moved to Pepperell many decades ago were able to do so at moderate incomes and lock in mortgage rates affordable to incomes near or below the area's median, newer and more racially or ethnically disparate groups must now make incomes much higher than median income in order to afford to purchase homes.

Table 15: Head of Household Race and Ethnicity by Income Category, Households, 2019-2023

	White Alone, Not Hispanic or Latino		Black or African American Alone		Asian Alone		Some Other Race or Two or More Races		Hispanic or Latino, All Races	
	#	%	#	%	#	%	#	%	#	%
Less than \$10,000	158	4.0%	0	0.0%	0	0.0%	20	9.3%	0	0.0%
\$10,000 to \$14,999	38	1.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$15,000 to \$19,999	33	0.8%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$20,000 to \$24,999	106	2.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$25,000 to \$29,999	134	3.4%	0	0.0%	17	13.4%	0	0.0%	0	0.0%
\$30,000 to \$34,999	36	0.9%	12	15.8%	0	0.0%	0	0.0%	0	0.0%
\$35,000 to \$39,999	61	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$40,000 to \$44,999	75	1.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$45,000 to \$49,999	46	1.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$50,000 to \$59,999	207	5.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$60,000 to \$74,999	318	8.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
\$75,000 to \$99,999	409	10.3%	12	15.8%	6	4.7%	0	0.0%	11	14.7%
\$100,000 to \$124,999	406	10.2%	0	0.0%	0	0.0%	6	2.8%	0	0.0%
\$125,000 to \$149,999	339	8.6%	9	11.8%	0	0.0%	76	35.2%	15	20.0%
\$150,000 to \$199,999	537	13.6%	11	14.5%	58	45.7%	114	52.8%	40	53.3%
\$200,000 or more	1,059	26.7%	32	42.1%	46	36.2%	0	0.0%	9	12.0%
Total	3,962	100%	76	100%	127	100%	216	100%	75	100%

Race and Ethnicity and Tenure

Pepperell has a higher proportion of owner-occupied housing compared to the state and region. Between 2019 and 2023, Pepperell's household tenure patterns by race and ethnicity reveal a community with a significantly higher rate of homeownership compared to both state and national averages, as well as the broader Greater Lowell region. Overall, 83% of Pepperell households are owner-occupied, compared to 63% in Massachusetts, 65% nationally, and 68% in Greater Lowell. White, non-Hispanic households in Pepperell have the highest ownership share at 83%, closely



mirroring the townwide average and exceeding both the state (70%) and national (73%) rates. Black or African American households in Pepperell show a stark difference from state and national trends, with 100% owner-occupancy compared to just 37% in Massachusetts and 44% nationally; however, this likely reflects the very small number of such households in town, which can skew percentages. Asian households in Pepperell have an ownership rate of 65%, higher than the state average (57%) and close to the Greater Lowell average (67%), but lower than White households in town. Households identifying as some other race or two or more races have an exceptionally high homeownership rate of 91%, far exceeding state and national figures. Hispanic or Latino households also show a 100% homeownership rate in Pepperell, again likely a product of a small sample size, contrasting sharply with the state (32%) and national (51%) averages. These patterns suggest that Pepperell's housing market is heavily owner-oriented, with limited rental opportunities across all racial and ethnic groups. While high ownership rates may indicate stability, they also point to a potential lack of housing diversity and affordability, particularly for renters, which could pose challenges for attracting and retaining a more diverse population.

Table 16: Occupied Households by Tenure and Race and Ethnicity from 2019-2023

	United States		Massachusetts		Pepperell		Greater Lowell	
	Owner Occupied	Renter Occupied	Owner Occupied	Renter Occupied	Owner Occupied	Renter Occupied	Owner Occupied	Renter Occupied
White Alone, Not Hispanic or Latino	73%	27%	70%	30%	83%	17%	75%	25%
Black or African American Alone	44%	56%	37%	63%	100%	0%	39%	61%
Asian Alone	62%	38%	57%	43%	65%	35%	67%	33%
Some Other Race or Two or More Races	52%	48%	37%	63%	91%	9%	43%	57%
Hispanic or Latino, All Races	51%	49%	32%	68%	100%	0%	42%	58%
Total	65%	35%	63%	37%	83%	17%	68%	32%

Source: U.S. Census Bureau, 2019-2023 American Community Survey.

Home Mortgage Disclosure Act (HMDA) Data

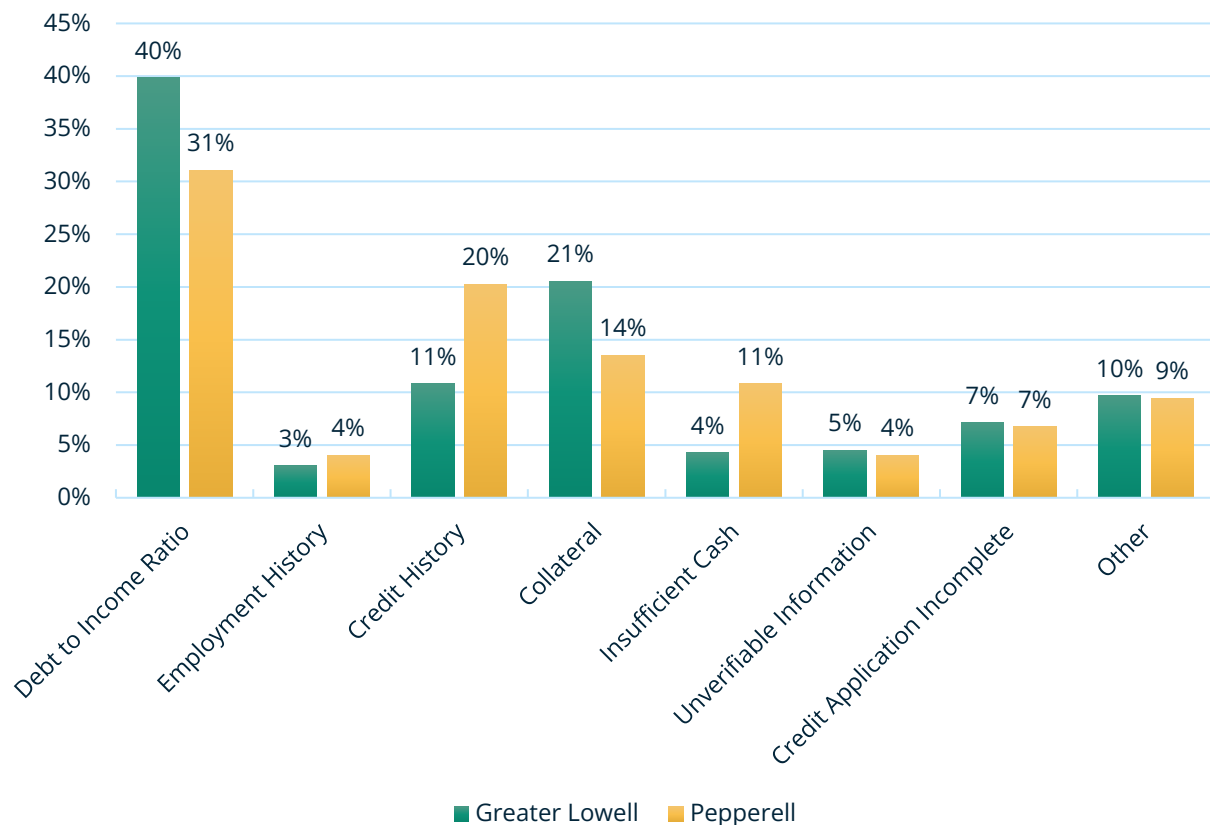
The Home Mortgage Disclosure Act (HMDA) requires financial institutions to maintain and publicly report data on mortgage loans. This data helps show whether lenders are serving local housing needs and lending patterns that could be discriminatory. This is the most accurate mortgage data



that is publicly available. For this analysis, NMCOG is using the HMDA data sets for the years 2018-2024. The region referring to Greater Lowell in this dataset excludes the Town of Pepperell.

Figure 6 shows the breakdown of mortgage application denials by region. Based on HMDA data for the years 2018–2024, denial patterns in Pepperell generally mirror those in the Greater Lowell region (excluding Pepperell), with debt-to-income ratio cited as the leading reason for mortgage application denials in both geographies. In Greater Lowell, 40% of denials were attributed to debt-to-income ratio compared to 31% in Pepperell. Credit history was the second most common reason in Pepperell at 20%, notably higher than the 11% reported in Greater Lowell. Conversely, collateral-related denials were more prevalent in Greater Lowell (21%) than in Pepperell (14%). Insufficient cash was also cited more frequently in Pepperell (11%) compared to the broader region (4%). Unverifiable information was cited more frequently in Greater Lowell (5%) compared to the broader region (4%). Credit Application Incomplete was cited more frequently in Greater Lowell (7%) compared to the broader region (7%). Overall, the data suggests that while financial capacity constraints are the primary barrier to homeownership across the region, Pepperell applicants experience comparatively greater challenges related to credit history and available cash at closing.

Figure 6: Reason for Mortgage Application Denial by Region, 2018-2024



Source: Consumer Financial Protection Bureau. (2025). HMDA Data Publication Platform. Federal Financial Institutions Examination Council. Retrieved from <https://ffiec.cfpb.gov/data-publication/2024>



HOUSING INVENTORY ANALYSIS

TOTAL YEAR-ROUND HOUSING UNITS

The 2020 Decennial Census counted a total of 4,588 year-round residential units in the Town of Pepperell. The HPP utilizes multiple data sources to determine the type, tenure, and vacancy rates of these units. Notably, the most recent American Community Survey (2019-2023) estimated 4,507 (+/- 290) units in Pepperell. This is less accurate because it is an estimate, not a count, but it can be useful because it is more recent and reports different attributes such as tenure.

However, local data is more reliable and up-to-date, so this HPP estimates the number of units by starting at the 2020 census count and adding the number of units the town permitted. As 119 net units were permitted in the years 2020-2025 (see **Table 27**), this HPP estimates that the total number of units in January 2025 is 4,707. It will utilize that number for setting housing production goals.

HOUSING TENURE

From 2000 to 2019–2023, Pepperell experienced modest overall growth in its housing stock, accompanied by a shift toward homeownership. The total number of occupied housing units increased by 12%, from 3,847 in 2000 to 4,313 in 2019–2023, as shown in **Table 17: Pepperell Housing Tenure Over Time (2000 - 2019-2023)**. Owner-occupied units rose from 3,055 to 3,593 over the same period, an 18% increase, and their share of total occupied units grew from 79% to 83%. In contrast, renter-occupied units declined from 792 in 2000 to 720 in 2019–2023, representing a 9% decrease and a drop in share from 21% to 17%. This trend indicates that housing production in Pepperell over the past two decades has primarily favored ownership opportunities, with limited new rental development. While the stability

FAST FACTS: HOUSING INVENTORY ANALYSIS

- **Pepperell's housing stock has grown slowly and remains tightly constrained.** Pepperell had approximately 4,588 year-round units in 2020 and an estimated 4,771 units by early 2025, reflecting modest growth over time.
- **The housing market is heavily owner-occupied, with a small rental share.** This ownership-oriented housing pattern mirrors peer suburbs but differs sharply from majority of Greater Lowell region and State, limiting options for renters, younger households, and lower-income residents.
- **Vacancy rates indicate a tight and competitive housing market.** Pepperell's ownership vacancy rate (0.9%) and rental vacancy rate (3.7%) are both below levels considered healthy, signaling limited availability and low turnover.
- **Home values and sale prices have shifted decisively toward higher price points.** Median single family sale prices rose + 40% since 2014, and the distribution of home values shifted sharply upward. Lower- and moderate-priced homes have all but disappeared.
- **Affordable Housing production is stalled.** The last unit that Pepperell added to its Subsidized Housing Inventory was in 2017.



associated with a high rate of homeownership can strengthen community ties, the shrinking rental share may limit housing options for lower-income households, young adults, and other residents seeking more flexible or affordable housing choices, factors that could influence the town's ability to meet future housing needs and diversity of stock goals.

Table 17: Pepperell Housing Tenure Over Time (2000 - 2019-2023)

	2000		2010		2019-23		Percent Change 2000 - 2019-23
	Number	Percent	Number	Percent	Number	Percent	
Owner Occupied	3,055	79%	3,320	79%	3,593	83%	18%
Renter Occupied	792	21%	877	21%	720	17%	-9%
Total Occupied Units	3,847	100%	4,197	100%	4,313	100%	12%

Source: U.S. Census Bureau, 2000, 2010, and American Community Survey 2019-2023

The proportion of owner-occupied units in Pepperell is in line with the amount in all peer suburbs, and significantly higher compared to both Greater Lowell and Massachusetts as a whole.

Table 18: Pepperell Housing Tenure Compared to the Region and State

	Region Outside							
	Pepperell		Lowell		Greater Lowell		Massachusetts	
	Number	%	Number	%	Number	%	Number	%
Owner Occupied	3,593	83%	59,356	83%	78,006	68%	1,728,986	63%
Renter Occupied	720	17%	12,304	17%	36,037	32%	1,033,084	37%
Total Occupied Housing Units	4,313	100%	71,660	100%	114,043	100%	2,762,070	100%

Source: U.S. Census Bureau 2019-2023 American Community Survey.

HOUSING VACANCY RATES

Pepperell's vacancy rate for ownership units is very low, at 0.9%. This is under what is considered a healthy vacancy rate of 2%.² Similarly, Pepperell's vacancy rate for rental units is also somewhat low at 4.3%. This is under the healthy rental vacancy rate of 7-8%.³

² *The Empty House Next Door*, Alan Mallach, 2018.

³ *Ibid.*



Table 19: Units by Vacancy Status, Pepperell, 2019-2023

	2019-2023	
	Number	Percent
Owner Occupied	3,593	99.1%
For sale only	33	0.9%
Sold, not occupied	0	0.0%
Total Owner Units	3,626	100.0%
Renter Occupied	720	96.3%
For Rent	28	3.7%
Rented, not Occupied	0	0.0%
Total Rental Units	748	100.0%
Occupied Housing Units	4,313	95.7%
Vacant Housing Units	194	4.3%
Total Housing Units	4,507	100.0%

Source: 2019-2023 American Community Survey.

Vacancy patterns in Pepperell differ in important ways from both the Greater Lowell region and broader geographies, as shown in **Table 20**. Pepperell's share of housing units for sale only (0.9%) is slightly higher than the regional average (0.4%) but still below the U.S. rate (1.0%), suggesting limited turnover in the for-sale market. Rental vacancies in Pepperell (3.7%) are nearly identical to the regional and state averages (3.4%–3.8%) but lower than the national figure (5.5%), reflecting tight rental availability.

Table 20: Vacancy Status, Selected Regions (2019-2023)

	Pepperell	Region Outside Lowell	Greater Lowell	Mass.	United States
For sale only (% of units intended for sale)	0.9%	0.2%	0.4%	0.6%	1.0%
Sold, not occupied (% of units intended for sale)	0.0%	0.3%	0.3%	0.7%	0.7%
For Rent (% of units intended for rent)	3.7%	3.8%	3.4%	3.4%	5.5%
Rented, not Occupied (% of units intended for rent)	0.0%	0.5%	0.3%	1.0%	1.1%
For seasonal, recreational, or occasional use (% of total units)	36.1%	31.4%	26.8%	63.3%	47.5%
Other vacant (% of total units)	63.9%	68.6%	73.2%	36.7%	52.6%

Source: U.S. Census Bureau 2019-2023 American Community Survey.

HOUSING MARKET CONDITIONS

As part of the Greater Lowell region, Pepperell plays an important role in addressing regional housing needs. State housing projections allocate future housing demand across regions based on demographic trends, labor markets, and development capacity. Communities with available land,



infrastructure capacity, and planning readiness are particularly important contributors to meeting regional housing needs. The following outlines Pepperell's recent market conditions and potential trends.

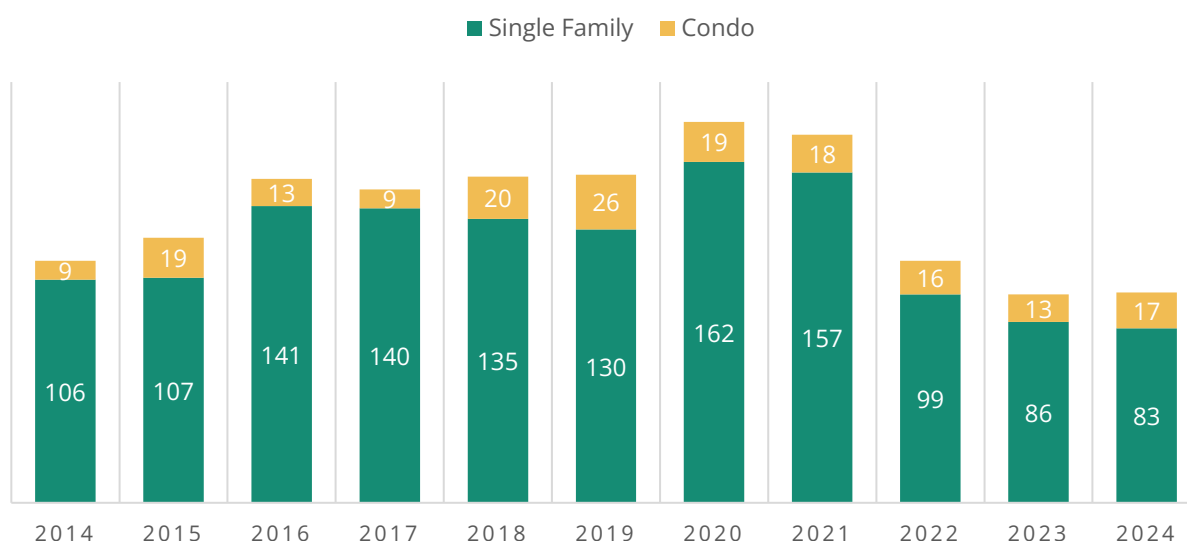
Residential Sales

Figure 7: Residential Sales in Pepperell (2014-2023) illustrates residential sales activity in Pepperell between 2014 and 2023, highlighting both overall market cycles and the town's continued reliance on single-family housing. Throughout the period, single-family homes accounted for the majority of sales each year, reflecting the town's predominantly owner-occupied, single-family housing stock. Condominium sales occurred consistently but at much lower volumes, indicating a limited supply of alternative ownership options such as smaller units suitable for first-time buyers, downsizing households, or seniors.

Residential sales increased steadily from 2014 through 2019 and surged sharply in 2020 and 2021, coinciding with the COVID-era housing market characterized by historically low interest rates, increased remote work flexibility, and heightened demand for suburban communities. Sales activity declined significantly after 2021. This downturn likely reflects rising interest rates, affordability constraints, and limited housing inventory, all of which reduced market activity and buyer mobility.

Overall, the trend underscores Pepperell's sensitivity to broader market conditions due to its heavy concentration of single-family homes. The relatively small and fluctuating condominium market suggests an opportunity to expand housing diversity to better support a range of household types, improve affordability, and enhance market resilience over time.

Figure 7: Residential Sales in Pepperell (2014-2023)



Source: The Warren Group, 2024.

Median Home Sales Price

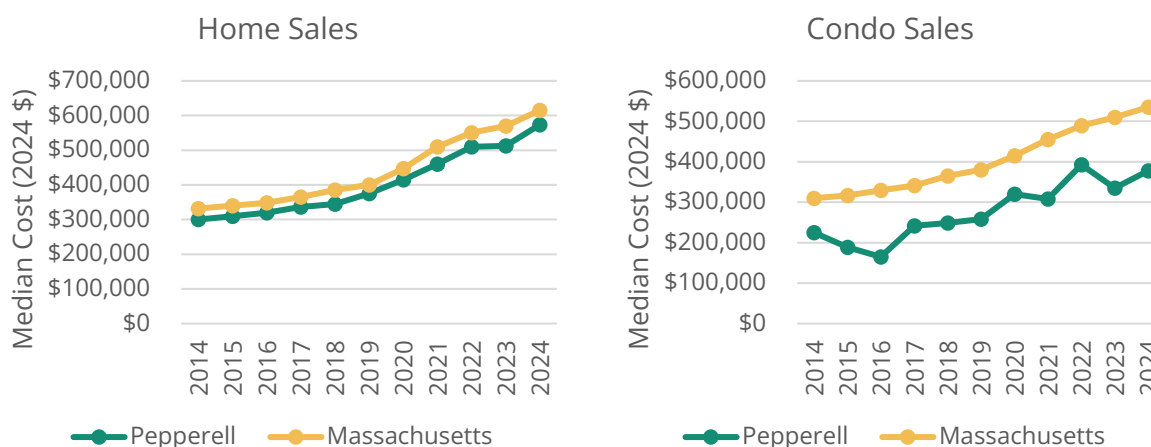
Between 2014 and 2024, median home sale prices in Pepperell, adjusted to 2024 dollars, showed significant overall growth for both single-family homes and condominiums, though with notable year-to-year fluctuations. Single-family home prices in Pepperell increased from \$400,170 in 2014 to \$573,500 in 2024—a 43% rise—mirroring the broader upward trend in Massachusetts, where single-family prices rose from \$437,910 to \$615,000 (40%). Pepperell's condominium market displayed more volatility, starting at \$296,868 in 2014, dipping to \$216,150 in 2016, then rebounding sharply to \$377,500 in 2024, a 27% overall increase. Compared to state trends, Pepperell's condos remain more affordable, as Massachusetts condo prices climbed from \$409,200 in 2014 to \$535,000 in 2024. The data suggests that Pepperell has generally kept pace with statewide price growth for single-family homes, while maintaining a lower entry point for condominiums, though the condo market's volatility may indicate limited supply. These rising prices, even when adjusted for inflation, reflect strong demand pressures and have implications for housing affordability, particularly for first-time buyers and households seeking lower-cost ownership options.

Table 21: Pepperell and Massachusetts Median Home Sales Price in 2024 dollars (2014-2024)

Year	Pepperell		Massachusetts	
	Single Family	Condo	Single Family	Condo
2014	\$400,170	\$296,868	\$437,910	\$409,200
2015	\$409,200	\$249,480	\$448,800	\$418,440
2016	\$419,069	\$216,150	\$455,880	\$431,645
2017	\$430,016	\$309,120	\$467,200	\$436,480
2018	\$431,125	\$310,938	\$481,250	\$456,125
2019	\$461,250	\$318,109	\$492,000	\$467,400
2020	\$506,300	\$390,400	\$545,340	\$506,300
2021	\$538,200	\$360,653	\$596,700	\$532,350
2022	\$545,700	\$419,975	\$588,500	\$523,048
2023	\$528,390	\$345,050	\$587,100	\$525,300
2024	\$573,500	\$377,500	\$615,000	\$535,000



Figure 8: Median Home and Condo Sales Prices in Pepperell and Massachusetts (2014-2024)



Source: The Warren Group 2024.

In 2024, Pepperell's housing market reflected moderate pricing within the Greater Lowell region, with relatively low sales volume compared to larger neighboring communities. The town recorded 83 single-family home sales at a median price of \$573,500, higher than Dracut (\$560,000) and Lowell (\$500,000), but lower than most other communities, including Billerica (\$675,000), Chelmsford (\$699,000), Tyngsborough (\$628,000), and especially high-priced Dunstable (\$858,000) and Westford (\$835,850). Condominium activity in Pepperell was limited, with only 17 sales at a median price of \$377,500, positioning the town above Lowell (\$326,633) and Dracut (\$340,000) but below Chelmsford (\$445,000), Tewksbury (\$480,000), and Westford (\$570,000). By comparison, Massachusetts as a whole reported a median single-family price of \$615,000 and a condo median of \$535,000, both higher than Pepperell's figures. Overall, the data suggest that Pepperell remains a more affordable homeownership option than much of the region, particularly for single-family homes, but its limited sales volume may point to a constrained housing supply, which could affect affordability and availability over time.

Table 22: 2024 Housing Sales and Prices in the Greater Lowell Region

Community	Single Family Sales	Median Sales Price	Condo Sales	Median Sales Price
Billerica	273	\$675,000	65	\$345,000
Chelmsford	290	\$699,000	154	\$445,000
Dracut	201	\$560,000	106	\$340,000
Dunstable	29	\$858,000	0	N/A
Lowell	414	\$500,000	307	\$326,633
Pepperell	83	\$573,500	17	\$377,500
Tewksbury	219	\$670,000	127	\$480,000
Tyngsborough	82	\$628,000	41	\$385,000
Westford	193	\$835,850	67	\$570,000
Massachusetts	42,138	\$615,000	18,759	535,000



Source: The Warren Group 2024.

Home Values

The American Community Survey asks homeowners how much they think their homes would sell for if they were currently on the market. Between the 2013–2017 and 2019–2023 periods, Pepperell experienced a significant upward shift in home values, reflecting broader housing market appreciation and growing affordability challenges. The share of homes priced below \$300,000 declined sharply, with major decreases in the \$200,000–\$249,999 (-83%), \$250,000–\$299,999 (-74%), and \$300,000–\$399,999 (-48%) ranges. At the same time, higher-priced homes increased substantially, particularly in the \$400,000–\$499,999 range (up 186%) and the \$500,000–\$749,999 range (up 390%), which together now account for roughly two-thirds of all owner-occupied units. The number of homes valued between \$750,000 and \$999,999 also nearly quadrupled. While the total housing stock grew modestly by 6%, the overall distribution shifted decisively toward higher price points, indicating reduced availability of lower and moderate priced homes and reinforcing the need for strategies in the Housing Production Plan to expand housing options that are affordable to a wider range of households.

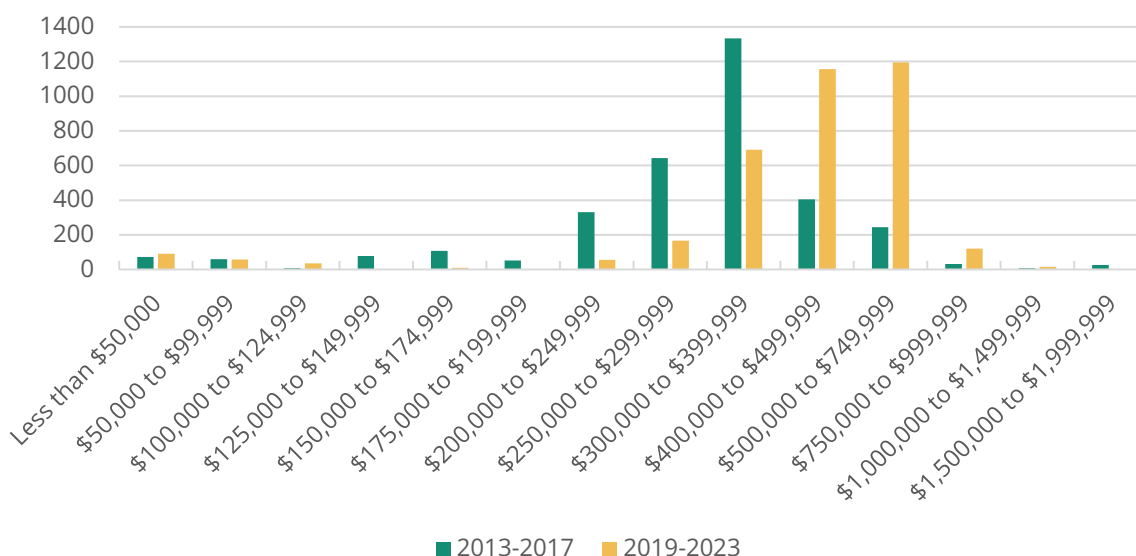
Table 23: Pepperell Home Values (2013-2017, 2019-2023)

	2013-2017		2019-2023		Change 2013-17 to 2019-23
	Number	Percent	Number	Percent	
Less than \$50,000	72	2%	90	3%	25%
\$50,000 to \$99,999	60	2%	57	2%	-5%
\$100,000 to \$124,999	8	0%	35	1%	338%
\$125,000 to \$149,999	77	2%	0	0%	-100%
\$150,000 to \$174,999	107	3%	9	0%	-92%
\$175,000 to \$199,999	52	2%	0	0%	-100%
\$200,000 to \$249,999	331	10%	56	2%	-83%
\$250,000 to \$299,999	643	19%	167	5%	-74%
\$300,000 to \$399,999	1,333	39%	691	19%	-48%
\$400,000 to \$499,999	404	12%	1,157	32%	186%
\$500,000 to \$749,999	244	7%	1,195	33%	390%
\$750,000 to \$999,999	31	1%	121	3%	290%
\$1,000,000 to \$1,499,999	8	0%	15	0%	88%
\$1,500,000 to \$1,999,999	26	1%	0	0%	-100%
Total	3,396	100%	3,593	100%	6%

Source: U.S. Census Bureau 2013-2017 and 2019-2023 American Community Survey.



Figure 9: Home Value, Homeowner Occupied Units (2013-2017 and 2019-2023)



Source: U.S. Census Bureau 2013-2017 and 2019-2023 American Community Survey.

Rent Rates

Fair Market Rent (FMR) is an estimate of the fortieth (40%) percentile gross rent in a given area and is used to determine the maximum amount certain voucher programs can compensate owners. Fair market rent rates for the Lowell HUD Metro FMR Area have steadily increased over time, with the largest increase occurring between 2021 and 2022.

Table 24: Fair Market Rent Rates for the Lowell HUD Metro FMR Area (2020-2025)

	Efficiency	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom
FY 2020 FMR	\$1,066	\$1,188	\$1,534	\$1,912	\$2,078
FY 2021 FMR	\$1,067	\$1,193	\$1,547	\$1,924	\$2,098
FY 2022 FMR	\$1,237	\$1,359	\$1,773	\$2,192	\$2,404
FY 2023 FMR	\$1,340	\$1,490	\$1,955	\$2,379	\$2,626
FY 2024 FMR	\$1,369	\$1,518	\$1,995	\$2,412	\$2,657
FY 2025 FMR	\$1,537	\$1,709	\$2,242	\$2,701	\$2,972

Source: FY 2020-2024 Lowell, MA Metro FMR Area, HUD Fair Market Rent Documentation System.

https://www.huduser.gov/portal/datasets/fmr/fmrs/FY2022_code/2022summary.odn Retrieved July 2025

Self-reported rent and utility costs are included in ACS estimations. Pepperell's median gross rent increased by \$178, an increase of 16%. This rate is second lowest rate of growth over that period in Greater Lowell, but it has a higher margin of error due to a smaller sample size.

Table 25: Median Gross Rents in the Greater Lowell Region (2013-2017, 2019-2023)

Community	Median Gross Rent 2013-17	Median Gross Rent 2019-23	Change 2013-17 to 2019-23	Percent Change 2013-17 to 2019-23
Billerica	\$1,340	\$2,132	\$792.00	59%



Chelmsford	\$1,306	\$1,959	\$653.00	50%
Dracut	\$1,281	\$1,740	\$459.00	36%
Dunstable	\$1,682	\$1,500	(\$182.00)	-11%
Lowell	\$1,089	\$1,603	\$514.00	47%
Pepperell	\$1,118	\$1,296	\$178.00	16%
Tewksbury	\$1,647	\$2,248	\$601.00	36%
Tyngsborough	\$1,266	\$1,863	\$597.00	47%
Westford	\$1,841	\$2,068	\$227.00	12%
Massachusetts	\$1,173	\$1,687	\$514.00	44%

Source: U.S. Census Bureau, 2013-2017 and 2019-2023 American Community Survey, Table B25064.

Table 26 and **Figure 10** shows the 2013–2017 and 2019–2023 periods, Pepperell's rental housing market shifted markedly toward higher rent levels. Lower-cost rental units became increasingly scarce, with units renting for less than \$300 eliminated entirely and substantial declines in the \$600–\$899 (-50%), \$900–\$1,249 (-59%), and \$1,250–\$1,499 (-45%) ranges. In contrast, higher-rent units grew significantly, particularly those renting for \$2,000–\$2,499, which increased by 400%, as well as the emergence of new units in the \$2,500–\$2,999 and \$3,000 or more categories.

By 2019–2023, nearly one-third of all rental units were priced at \$2,000 or more, compared to just 2% in the earlier period. This shift toward higher rents, combined with the loss of lower-cost options, indicates rising affordability pressures for renters in Pepperell and underscores the importance of the Housing Production Plan in promoting the development and preservation of housing that is affordable to low and moderate income households.

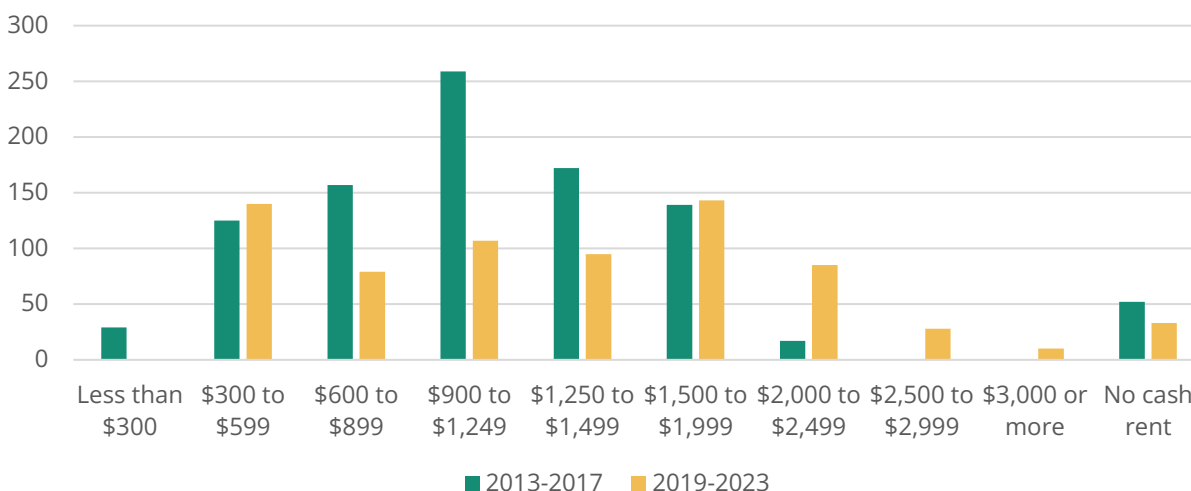
Table 26: Pepperell Housing Units by Rent Rate (2013-2017, 2019-2023)

	2013-2017		2019-2023		% Change 2013-17 - 2019-23
	Number	Percent	Number	Percent	
Less than \$300	29	3%	0	0%	-100%
\$300 to \$599	125	13%	140	19%	12%
\$600 to \$899	157	17%	79	11%	-50%
\$900 to \$1,249	259	27%	107	15%	-59%
\$1,250 to \$1,499	172	18%	95	13%	-45%
\$1,500 to \$1,999	139	15%	143	20%	3%
\$2,000 to \$2,499	17	2%	85	12%	400%
\$2,500 to \$2,999	0	0%	28	4%	-
\$3,000 or more	0	0%	10	1%	-
No cash rent	52	5%	33	5%	-37%



Total	950	100%	720	100%	-24% ⁴
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Figure 10: Gross Rent (2013-2017 and 2019-2023)



Source: U.S. Census Bureau 2013-2017 and 2019-2023 American Community Survey.

MARKET RATE AND SUBSIDIZED HOUSING INVENTORY (SHI) RESIDENTIAL DEVELOPMENT

Recent Permitting and Developments

Residential growth in Pepperell between 2020 and 2025 has been driven overwhelmingly by single-family housing, which accounted for 96 of the 148 units permitted during this period, while no multifamily (3+ unit) developments were permitted. Modest diversification in housing production is evident through the addition of 22 duplex units, 20 accessory dwelling units (ADUs), and 10 manufactured/mobile homes, though these remain a relatively small share of overall growth. Annual unit production peaked in 2021 (+28 units) and 2022 (+25 units) before slowing to more modest gains in 2023–2025, reflecting a gradual decline in new construction activity. Notably, demolitions totaling 29 units offset some of the gross production, reducing the overall net housing increase. The recent uptick in ADU permits in 2025 suggests emerging interest in smaller, flexible housing options, likely in response to changing household needs and affordability pressures. This also suggests the new State ADU by right law is having an impact on adding new housing units. Overall, the permitting pattern indicates that Pepperell's housing stock continues to expand at a steady but moderate pace, with limited production of multifamily housing, which may constrain the Town's ability to meet diverse housing needs, including those of smaller households, seniors, and moderate-income residents.

⁴ Although the American Community Survey estimates showed an 24% decline in renter-occupied homes, this is within the margin of error. The more accurate 2020 Decennial Census showed an increase in renter-occupied homes from 2010. That data source does not include gross rents, so these estimates are presented instead.



Table 27: Pepperell Residential Permits, 2020-2024

Year	Single-Family	Manufactured / Mobile Home	ADUs	Duplex Units	Multi-family (3+ Units)	Demoed Units	Total Unit Change
2020	22	1	0	4	0	-4	+23
2021	30	1	2	8	0	-13	+28
2022	20	4	2	4	0	-5	+25
2023	12	1	4	2	0	-2	+17
2024	10	2	1		0	-2	+11
2025	2	1	11	4	0	-3	+15
Total	96	10	20	22	0	-29	119

Source: Town of Pepperell Building Permit Records.

Subsidized Housing Inventory (SHI)

The last unit that Pepperell added to its Subsidized Housing Inventory was in 2017. One unit at Lowell Place (131 Lowell Road) was added, bringing Pepperell's total to 130. **This is 2.8% of its total housing units, 329 units short of the goal of 459 units.** Examining the larger regional context, seven of the nine communities in Greater Lowell are at or near the state's 10% SHI goal. The communities that are less than 1% below the state's goal had met the goal based on the 2010 census but fell below when the goal was updated by the 2020 Census. This does not take into account units that are currently being developed. **Table 28** illustrates Pepperell's standing related to SHI units and the progress over the past decade in the region.

Table 28: Subsidized Housing Inventory in the Greater Lowell Region (2016-2025)

Community	Year-Round Housing Units 2020	Total Subsidized Housing Inventory (SHI) Units			Percent SHI Units of 2020 Total	
		January 2014	January 2025	Percent Change	January 2014	January 2025
Billerica	15,460	857	1,692	97%	5.5%	10.9%
Chelmsford	14,696	1,064	1,448	36%	7.2%	9.9%
Dracut	12,304	719	657	-9%	5.8%	5.3%
Dunstable	1,145	0	0	-	0.0%	0.0%
Lowell	43,370	5,215	5,128	-2%	12.0%	11.8%
Pepperell	4,588	129	130	1%	2.8%	2.8%
Tewksbury	12,098	1,030	1,111	8%	8.5%	9.2%
Tyngsborough	4,622	340	500	47%	7.4%	10.8%
Westford	8,929	351	1,074	206%	3.9%	12.0%
Greater Lowell Region	117,212	9,705	11,740	21%	8.3%	10.0%

Source: Subsidized Housing Inventory Records: <https://www.mass.gov/info-details/subsidized-housing-inventory-shi>



Table 29 provides a summary of Pepperell's current SHI, including individual projects and key attributes. There are 47 units that currently have an affordability expiration between 2029-2031.

Table 29: Subsidized Housing Inventory Properties in Pepperell as of July 2025

DHCD ID #	Project Name	Address	Type	Total SHI Units	Affordability Expires	Built w/ Comp. Permit?	Subsidizing Agency
2455	n/a	4 Foster St.	Rental	51	Perp	No	EOHLC
2456	n/a	8 Foster St	Rental	12	Perp	No	EOHLC
2457	n/a	68 Groton St.	Rental	5	Perp	Yes	EOHLC
2458	n/a	Cottage St.	Rental	2	Perp	Yes	EOHLC
2459	Mayfield Park	22-24 Tucker St.	Ownership	7	2029	No	EOHLC
2460	Pepperell Meadows	River Rd.	Rental	40	2032	No	RHS
4418	DDS Group Homes	Confidential	Rental	5	N/A	No	DDS
9481	Emerson Village	196 Nashua Rd.	Ownership	7	Perp	Yes	EOHLC
9482	Lowell Place	131 Lowell Rd.	Ownership	1	Perp	Yes	MassHousing
Pepperell Totals				130	% Subsidized		2.83%
Census 2020 Year Round Housing Units				4,588			

Source: Subsidized Housing Inventory Records provided by EOHLC January 4, 2025.

Projected Housing Development

Projecting future housing unit development is difficult as market conditions can quickly change. This HPP utilized multiple information sources to develop a rough housing projection for the purpose of setting affordable housing goals.

As described in **Table 2: Number of Households and Growth, Pepperell (2000-2020, 2030-2050 Projection)** **Table 30** in the Demographic Analysis, Pepperell's number of households is anticipated to grow to 4,809 by 2030. Assuming Pepperell's January 2025 number of units is 4,707, that would require roughly 20 units per year. This is very similar to Pepperell's average annual net permitted units over the last five years, which is roughly 19 units per year. Although that number has been lower than average in the last three years, it is reasonable to assume this is due to interest rates and material costs and other factors may return development to the average. These and other projection methodologies are detailed below.



Table 30: Projection Methodology Comparison

Methodology	Projected Average Annual Production
Analysis of pipeline information	44 units
Linear model ⁵ projection based on 2010 and 2020 census data	25 units
Linear model project based on 2021-2025 permits data	19 units
UMDI Projection ⁶ average between 2020 and 2030	38 units
Difference of 2030 UMDI Projection and 2025 Existing Units average	20 units

Availability of developable land is not currently a constraint in Pepperell, adding confidence to the assumption current development trends will continue. The alignment of the linear model based on permit data and the UMDI projection minus existing units lead to a projection that Pepperell could anticipate growth of up to around 20 units per year.

Notably, this does not include housing built because of policy interventions, including comprehensive permit developments. Known larger developments that might spike development in certain years are described in the next section.

The Housing Inventory Pipeline

As part of developing the HPP, NMCOG researched the housing inventory pipeline. For the purposes of this HPP, the housing pipeline was defined as all subsidized units and all other developments of five or more units that have been issued permits, are in the permitting process, or are otherwise known by the Town's planning department. There were no developments outside of the SHI criteria projects currently in the pipeline.

As of March of 2026, there are two (2) developments that are planned to include SHI-eligible units in the "pipeline" pending submittal and/or approval as local action units. These would create 190 SHI units and 40 market rate units if constructed as planned. These are summarized in **Table 31** below:

Table 31: Pipeline of Subsidized Housing Inventory Projects as of March 2026

Address	Type	Affordability Expires	Built with a Comprehensive Permit?	Est. Complete	SHI Units	Total Units
55-59 Leighton Street	Income Restricted Rental	Perpetuity	Yes; 40A project	Late 2026	180	180
Woodland Ridge	Income Restricted Ownership		Yes; 40A project	2027	10	40
Total					190	220

Source: Town of Pepperell, March 2026.

⁵ Linear models assume that the average annual rate of production between the two dates would continue

⁶ Long-Term Population Projections for Massachusetts Municipalities and Regional Planning Areas, 2023.



Previous Projected Total Housing Unit Development and SHI Goal compared to Actual Development

When developing a local housing projection, it is also important to assess the accuracy of previous plans. The *Pepperell Housing Production Plan for 2021-2025* projected that Pepperell would add 18 total units per year through 2025 for a total of 90 new units, or 4,595 units by the end of 2025 on the town's average growth rate of 3.9%. The calculation estimated the town would add 14 SHI units in 2021, then 9 SHI units per year through 2025 to 50 new SHI units. Well below the needed 315 unit gap to meet the 10% goal. The plan set two additional scenario goals for annual affordable units: 23 in a 0.5% of total housing units scenario, and 45 in a 1.0% scenario.

The actual number of total units created was 96 with no SHI units – a slightly higher rate of development than projected, but with a much lower rate of SHI development.

Overall Five-Year Projected Housing Development

When combining the assumed annual projection of 20 units built without policy interventions or comprehensive permits per year with the pipeline data, **Table 32** was created, which represents anticipated development under the status quo. As projects are completed or cancelled and as new projects enter the pipeline, these assumptions should be revisited. This projection will be used to evaluate the numerical goal of annual SHI units in the next section.

Table 32: Projected Total New Units and New SHI Units

Year	2026	2027	2028	2029	2030
Total New Units	200	60	20	20	20
SHI Units	180	10	0	0	0

Source: NMCOG Analysis

The next section will also describe the specific types of housing needed. For example, based on demographic trends and statewide projections, Pepperell is experiencing increasing demand for

Housing Type

smaller ownership units
multifamily housing
rental units
starter homes
accessible housing
income-restricted housing

Demand Driver

downsizing older adults
smaller households
younger households and workforce
first-time buyers
aging population
cost burden trends



HOUSING AFFORDABILITY ANALYSIS

If the Demographic Analysis could be considered an analysis of housing demand, and the Housing Inventory Analysis could be considered an analysis of housing supply, this section of the Comprehensive Needs Assessment combines supply and demand to analyze housing affordability and identify the gaps between Pepperell's housing supply and demand.

INFLATION ADJUSTED MEDIAN INCOME, SALES PRICE, AND RENT

Table 33 and **Figure 11** compare the inflation-adjusted change in median single family home sales price, rent, and income in Pepperell. Between 2014 and 2024 (in inflation-adjusted 2024 dollars), Pepperell experienced a pronounced divergence between housing prices and household incomes. Median single-family home sale prices increased steadily from approximately \$400,000 in 2014 to \$573,500 in 2024, an increase of more than 40 percent, while median condominium prices also rose substantially, despite year-to-year volatility, reaching \$377,500 in 2024.

In contrast, median household income, which had been keeping up with housing costs, peaked around 2019–2020 and then declined in subsequent years, falling from roughly \$147,700 in 2019 to \$127,000 by 2023. This widening gap between home prices and incomes indicates that housing has become significantly less affordable for many households over the past decade.

FAST FACTS: HOUSING AFFORDABILITY

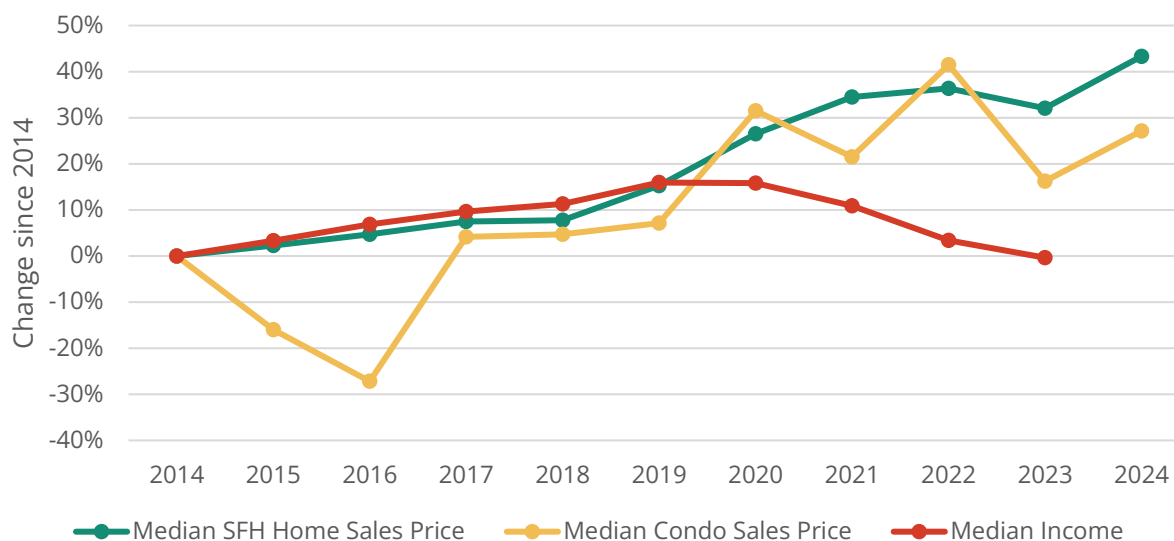
- **Housing prices have significantly outpaced income growth, reducing affordability.** Between 2014 -2024, inflation-adjusted median single-family home prices increased over 40% (from about \$400K to \$573K)
- **Renters face growing cost burdens while homeowners remain relatively stable.** Nearly two in five renters in Pepperell were cost burdened by 2019–2023, with both moderate & severe renter cost burdens increasing over time highlighting a widening affordability disparity between renters & owners.
- **Cost burdens are most severe among extremely low- & very low-income households.** Housing affordability challenges are heavily concentrated among lower-income residents. This underscores a critical need for deeply affordable housing options and targeted affordability strategies.
- **Seniors & non-family households experience the greatest affordability pressures.** Elderly non-family households, particularly seniors living alone, face the highest levels of housing cost burden. Other non-family households show elevated burden rates, reflecting demographic trends toward smaller households & an aging population living on fixed incomes.
- **There is a clear mismatch between housing supply and what residents can afford.** The housing stock shows a shortage of lower- and moderately priced homes & lower-rent units, limiting options for first-time buyers, renters & moderate-income households reinforcing affordability challenges across the community.



Table 33: Pepperell Median Home Sales Prices and Income in 2024 Dollars, 2014-2024

Year	Median SFH Home Sales Price	Median Condo Sales Price	Median Income
2014	\$400,170	\$296,868	\$127,438
2015	\$409,200	\$249,480	\$131,637
2016	\$419,069	\$216,150	\$136,183
2017	\$430,016	\$309,120	\$139,688
2018	\$431,125	\$310,938	\$141,844
2019	\$461,250	\$318,109	\$147,745
2020	\$506,300	\$390,400	\$147,608
2021	\$538,200	\$360,653	\$141,298
2022	\$545,700	\$419,975	\$131,744
2023	\$528,390	\$345,050	\$126,976
2024	\$573,500	\$377,500	Not available

Figure 11: Pepperell Median Home Sales Prices and Income Change over Time, 2014-2024



Source: Home Sales Price: Warren Group, 2024. Median Rent and Median Income: U.S. Census Bureau, 2009-2013 – 2019-2023 American Community Survey Five-Year data, Tables B25031 and S1903. Adjusted through Bureau of Labor Statistics (BLS) Inflation Rate Calculator, which uses the average Consumer Price Index (CPI). Adjustment rate from May of last year of each ACS survey to May 2024.

HOUSING COST BURDEN

A household is defined as housing cost burdened if it spends more than 30% of household income on mortgage or rent and certain other costs such as insurance and utilities. Severe cost burden means a household is spending 50% of its income. Renters have become increasingly cost burdened. **Table 34** shows that between the 2013–2017 and 2019–2023 periods, housing cost

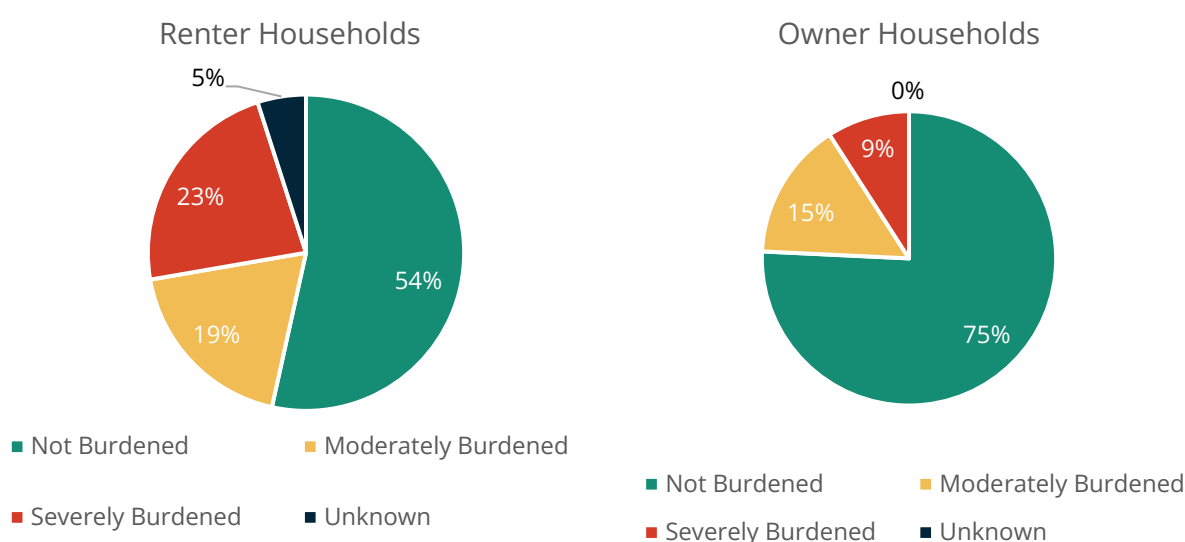


burden trends in Pepperell indicate growing pressure on renters and continued, though more moderate, challenges for homeowners. Among renter households, the share that is cost burdened increased, with moderately burdened renters rising from 15 percent to 19 percent and severely burdened renters increasing from 19 percent to 23 percent. This occurred even as the total number of renter households declined. As a result, nearly two in five renters in Pepperell were cost burdened in 2019–2023. In contrast, homeowners experienced a slight improvement overall, with the share of owners not cost burdened increasing from 72 percent to 75 percent, and the proportion of moderately burdened owners declining from 19 percent to 15 percent. These patterns highlight a widening disparity between renter and owner affordability conditions and underscore the importance of addressing renter cost burdens through expanded affordable rental options and strategies to stabilize housing costs.

Table 34: Pepperell Residents Who Are Cost Burdened (2013-2017, 2019-2023)

Housing Cost Burden	Renters				Owners			
	2013-2017		2019-2023		2013-2017		2019-2023	
	Households	Percent	Households	Percent	Households	Percent	Households	Percent
Not Burdened	556	59%	391	54%	2,453	72%	2,711	75%
Moderately Burdened	141	15%	134	19%	638	19%	555	15%
Severely Burdened	182	19%	162	23%	294	9%	315	9%
Unknown	71	7%	33	5%	11	0%	12	0%
Total	950	100%	720	100%	3,396	100%	3,593	100%

Figure 12: Pepperell Residents Who Are Cost Burdened (2019-2023)



Source: U.S. Census Bureau, 2013-2017 and 2019-2023 American Community Survey, Table B25095.

Housing cost burdened households are concentrated at the very low income and extremely low-income categories. Nearly three-quarters of extremely low-income households and nearly one third



of very low-income households are severely cost burdened, meaning that these households are paying over half their income on rent and utilities.

Table 35: Pepperell Cost Burdened Households By Income (2017-2021)

Income Category	Not Burdened		Moderately Burdened		Severely Burdened		Total
	Households	Percent	Households	Percent	Households	Percent	
Extremely Low Income	90	18%	95	19%	310	63%	495
Very Low Income	75	24%	150	48%	90	29%	315
Low Income	265	56%	150	32%	55	12%	470
Moderate Income	200	63%	90	28%	30	9%	320
Above Median Income	2,525	91%	225	8%	10	0%	2,760
Total	3,155	72%	710	16%	495	11%	4,360

Source: Comprehensive Housing Affordability Strategy Data 2017-2021. [Consolidated Planning/CHAS Data / HUD USER](#)

Table 36 reveals that housing cost burdens in Pepperell vary notably by household type, with non-family and elderly households experiencing the greatest affordability challenges. Overall, 27 percent of all households were cost burdened between 2017 and 2021. Elderly non-family households face the most acute pressures, with more than half (52 percent) cost burdened and one-quarter (25 percent) severely burdened, reflecting the vulnerability of seniors living alone on fixed incomes. Other non-family households also experience high levels of burden, with 43 percent cost burdened and 21 percent severely burdened. Family households generally fare better, particularly small families, of whom 85 percent are not cost burdened; however, large families still experience notable strain, with 25 percent cost burdened and 13 percent severely burdened. Elderly family households also show meaningful levels of burden, with nearly 30 percent paying more than 30 percent of income toward housing.

Table 36: Pepperell Cost-burdened Households by Household Type (2017-2021)

Household Type	Not Burdened		Moderately Burdened		Severely Burdened		Total
	Households	Percent	Households	Percent	Households	Percent	
Elderly Family	514	71%	135	19%	75	10%	725
Small Family	1,720	85%	214	11%	90	4%	2,020
Large Family	285	75%	50	13%	50	13%	380
Elderly Non-Family	285	48%	169	28%	150	25%	595
Other Non-Family	364	57%	140	22%	130	21%	634
Total	3,168	73%	708	16%	495	11%	4,354

Source: Comprehensive Housing Affordability Strategy Data 2017-2021. [Consolidated Planning/CHAS Data / HUD USER](#)



FORECLOSURES AND EVICTIONS

While there are some racial discrepancies regarding mortgage application denials in Pepperell (see **Home Mortgage Disclosure Act (HMDA) Data** section), the rate of foreclosure petitions remains very low. Pepperell saw 0.56 foreclosure petitions per 1,000 owner households between January and June of 2025. The number of foreclosure petitions submitted each year has also remained very low since 2021, between a low of 1 and a high of 8 annually.

Pepperell saw a rate of 11.11 eviction filings per 1,000 renters in 2025, the lowest in the NMCOG region and below the 16.96 eviction filings per 1,000 state average over the same period ⁷

GAPS BETWEEN EXISTING HOUSING NEEDS AND CURRENT SUPPLY

Owner-Occupied Housing Supply and Demand

NMCOG analyzed 2019-23 American Community Survey data sets of the housing stock's estimated values versus the household incomes of the community to assess demand. **Table 37** reveals a pronounced mismatch across home value ranges, with shortages concentrated at lower and moderate price points and a surplus at the upper end of the market. Demand substantially exceeds supply for homes priced between \$50,000 and \$299,999, including the most significant gaps in the \$150,000–\$199,999 range (a deficit of 364 units) and the \$50,000–\$99,999 range (a deficit of 179 units), indicating limited options for first-time buyers and moderate-income households. In contrast, homes valued above \$400,000 show a surplus of approximately 766 units, reflecting that higher-priced housing production has outpaced demand relative to local incomes.

Table 37: Pepperell Owner-Occupied Housing Supply versus Demand (2019-2023)

Home Value	Estimated Demand	Estimated Supply	Mismatch
Less than \$50,000	69	90	21
\$50,000 to \$99,999	236	57	-179
\$100,000 to \$149,999	121	35	-86
\$150,000 to \$199,999	373	9	-364
\$200,000 to \$299,999	335	223	-112
\$300,000 to \$399,999	737	691	-46
More than \$400,000	1,722	2,488	766
Total	3,593	3,593	0

Source: U.S. Census Bureau, 2019-23 American Community Survey, NMCOG Analysis

Renter-Occupied Housing Supply and Demand

Table 38 provides an assessment of renter-occupied housing supply and demand in 2019–2023. It shows substantial mismatches across rent levels. The most acute shortages occur at the lowest rent levels, with a deficit of 104 units for households seeking units renting for less than \$300 or with no

⁷ "Housing Stability Monitor: Massachusetts Evictions and Foreclosures: Fourth Edition September 2024." Massachusetts Housing Partnership. Accessed January 8th, 2025. <https://www.mhp.net/news/2024/housing-stability-monitor>.



cash rent, and continued gaps in the \$600–\$899, \$900–\$1,249, and \$1,250–\$1,499 ranges, which together represent core affordability levels for low- and moderate-income renters. This indicates that much of the existing rental supply is concentrated in mid-to-higher rent categories that do not fully align with local renter needs. These findings underscore the importance in prioritizing the creation and preservation of affordable rental housing, particularly at the lowest rent levels, to better match the distribution of supply with household demand.

Table 38: Pepperell Renter-Occupied Housing Supply versus Demand (2019-2023)

Gross Rent	Estimated Demand	Estimated Supply	Mismatch
Less than \$300 or no cash rent	137	33	-104
\$300 to \$599	60	140	80
\$600 to \$899	103	79	-24
\$900 to \$1,249	152	107	-45
\$1,250 to \$1,499	103	95	-8
\$1,500 to \$2,499	73	228	155
\$2,500 or more	92	38	-54
Total	720	720	0

Source: U.S. Census Bureau, 2019-23 American Community Survey, NMCOG Analysis



AFFORDABLE HOUSING EFFORTS

This section of the Comprehensive Needs Assessment provides information on the progress the Town has made during the performance of the *Pepperell Housing Production Plan for 2021-2025* and the current resources the Town may call upon for housing development. This is provided both as a baseline for continued improvement and to evaluate what agencies and resources may be utilized to advance goals defined in the next chapter.

PROGRESS ON PREVIOUS PLANS

Pepperell has made meaningful progress on several housing-related actions identified in past planning efforts, particularly through the implementation of recommendations from the Housing Production Plan for 2021-2025 and the 2021 Master Plan. Most notably, the Town adopted the Community Preservation Act, creating a local funding source that can be used to support affordable housing, open space protection, recreation, and historic preservation. Pepperell also established an Affordable Housing Trust, advancing a key recommendation of both plans to create a more structured and proactive framework for supporting local housing initiatives. Together, these accomplishments have strengthened the Town's capacity to finance and coordinate affordable housing efforts and provide an important foundation for future collaboration among the Trust, the Affordable Housing Committee, and development partners on housing initiatives that are compatible with community character.

The specific actions, goals, and progress are listed in **Appendix 2: Error! Reference source not found..** These goals primarily entail continuing to produce a variety of housing types for people with a wide range of socio-economic backgrounds.

AFFORDABLE HOUSING TRUST

The Pepperell Affordable Housing Trust Fund was established by the Town on September 27, 2021, under Massachusetts law (MGL Chapter 44, Section 55C) with the purpose of preserving and creating affordable housing in the town for the benefit of low- and moderate-income households and for the broader funding of affordable housing. The Trust is governed by a seven-member Board

FAST FACTS: HOUSING EFFORTS

- **Pepperell recently adopted tools to promote affordable housing development but hasn't used them yet.** In the last HPP period, Pepperell adopted CPA and created an Affordable Housing Trust. Neither have begun making affordable housing investments beyond consulting and legal expenses.
- **Pepperell's Affordable Housing Committee has stopped meeting.** The committee has not met since August 2024 and only has two out of seven members seated.
- **Despite a small capacity, Pepperell has undertaken strong actions.** Pepperell has explored inclusionary zoning, passed several zoning bylaws related to housing including an historic adaptive reuse bylaw, and explored a 40R district. A single planner with volunteer and RPA support has been able to undertake these initiatives.



of Trustees appointed by the Select Board, including at least one Select Board member, with trustees serving two-year terms (and initial staggered terms). Trustees meet at least quarterly, elect a chair annually, and may form committees to support the Trust's work.

Under its Declaration of Trust, the board has broad authority to accept and manage funds and property by gift, grant, or contribution; purchase, sell, lease, or transfer real and personal property; and disburse Trust funds through loans or grants to support the creation or preservation of affordable housing projects in Pepperell. Trust funds may include general appropriations, dedicated fees, or money received under the Community Preservation Act (which must be used exclusively for community housing and separately accounted for). The Town Treasurer acts as custodian of the Trust's funds and is responsible for maintaining separate accounts and investing assets in accordance with state law, with all records subject to annual independent audit.

The Trust operates as a municipal public body subject to open meeting and municipal procurement laws, is tax-exempt, and exists in perpetuity unless legally terminated; if it is ever dissolved, remaining assets must be transferred back to the town for affordable housing purposes.

The Trust Board of Trustees was established following the recommended action in the last Housing Production Plan. The seven (7) member Board of Trustees has had three (3) long term vacancies.

COMMUNITY PRESERVATION COMMITTEE

The Pepperell Community Preservation Committee (CPC) was established in 2022, following voter adoption of the Massachusetts Community Preservation Act (MGL c.44B). The CPA created a dedicated Community Preservation Fund supported by a local property tax surcharge and annual state matching funds. Under state law and the local bylaw, CPA revenues must be used for eligible purposes including open space, historic preservation, recreation, and community housing—specifically including the acquisition, creation, preservation, support, and rehabilitation of affordable housing. At least 10 percent of annual CPA receipts must be allocated or reserved for community housing, ensuring an ongoing funding source to support affordable housing initiatives.

The CPC is composed of seven voting members: one representative each from the Planning Board, Conservation Commission, Historical Commission, Recreation Commission, and Housing Authority Board, along with two at-large members appointed by the Select Board. Initial appointments were staggered to provide continuity, with subsequent terms set at three years. The committee is responsible for conducting an annual assessment of the Town's preservation needs and resources, consulting with municipal boards, and holding public hearings to gather community input. Based on this review, the CPC develops and submits funding recommendations to Town Meeting, including project descriptions and cost estimates. The committee may also recommend setting aside funds for future priorities or transferring CPA funds to support the activities of the Affordable Housing Trust. Through this structured review and recommendation process, the CPC serves as a central funding and policy mechanism for advancing Pepperell's affordable housing goals within the broader framework of community preservation.



Table 39: Pepperell Community Preservation Act Expenditures

Project	Action Taken	Date	Appropriation
Affordable Housing Trust - Consulting and Legal	In progress	May 2025	\$35,000
Pepperell Affordable Housing Trust Fund - Funding accumulation of Phase 1 for the Affordable Housing Trust	In progress	May 2025	\$50,000
Pepperell Affordable Housing Trust Fund - Increase the amount held in the trust fund to support affordable housing in Pepperell.	In progress	May 2024	\$50,000
		Total	\$135,000

Source: Community Preservation Coalition, https://www.communitypreservation.org/cpc-report?report_src=bbzvidkqg/a=dr&rid=221

In 2024, the Town adopted the Town of Pepperell Community Preservation Plan 2024. This CP Plan attempts to capture Pepperell's community preservation needs and goals in the four CPA target areas. It also outlines the processes by which the Committee solicits, reviews, and recommends project proposals for CPA funding. It is updated regularly to reflect changes in goals or emphasis. The plan uses the Housing Production Plan 2021-2025's goals and strategies as the framework for guiding CPC housing decisions. This plan should be updated to align with this HPP for 2026-2031 when it is adopted.

PEPPERELL HOUSING AUTHORITY

The Pepperell Housing Authority is responsible for all public housing programs and oversight in the town. The Housing Authority is comprised of a five member Board of Directors with the members serving a five-year term. Four members of the Board of Commissioners are elected at Town election, while the other member is appointed by the Governor. The Chairman and other officers are elected by the Board. The Board meets once a month and acts as a policy setting board.

The Authority currently owns and/or manages seventy (70) units of low- and moderate-income housing, including the following:

- Fifty-seven (57) one bedroom units for senior or disabled citizens (four of the units are barrier free);
- Six (6) bedrooms within congregate apartment housing for mentally challenged senior or disabled citizens (staffed 24 hours/day); and
- Seven (7) family units (six two-bedroom apartments and one barrier-free 3-bedroom unit).

The Board of Commissioners is responsible for setting and adhering to all federal and state policies pertinent to the "proper and efficient" operation of the Authority. The Housing Authority Board is supported by an Executive Director and an Administrative Assistant. The Executive Director is responsible for the daily operations and oversight of the Authority. Services are provided without regard to race, color, creed, religion, sex or national origin.



AFFORDABLE HOUSING COMMITTEE

The Pepperell Affordable Housing Committee consists of seven (7) members appointed by the Select Board. These members consist of three citizens at large, a representative of the Planning Board, a representative of the Zoning Board of Appeals, a representative of the Select Board and a representative of the Finance Committee. This committee has listed only two (2) current members and has not met since August 14, 2024.

PEPPERELL PLANNING DEPARTMENT

The Pepperell Planning Department consists of a Town Planner and an Assistant to the Planning Board that staffs Pepperell's Planning Board and Zoning Board of Appeals. This includes the maintenance and implementation of Pepperell's Master Plan, Housing Production Plan, and other plans such as the Hazard Mitigation Plan. The Planning Department assists with permit review, updating zoning bylaws and subdivision control regulations.



DEVELOPMENT CONSTRAINTS AND LIMITATIONS

ZONING ANALYSIS

This section summarizes the local zoning regulations that are pertinent to the development of housing, and affordable housing in particular, in Pepperell. It includes a discussion of the density and dimensional requirements for a residential subdivision, as well as a summary of the special permits that are available for a typical housing development. Where appropriate, affordability requirements for Special Permit projects are also outlined.

Zoning Districts

The 2014 Zoning Bylaw has seven (7) base zoning districts, of these, six (6) allow some types of housing as of right or by special permit from the Planning Board. Five (5) of these are intended as residential districts:

Table 40: Zoning Base Districts with Land Area

Residential Base Zones	Description
RR – Rural Residence District 7,066.61 Acres - Land Area of Town 48%	These are the lowest density single-family residence districts
TR – Town Residence District 4,094.94 Acres - Land Area of Town 28%	
RCR – Recreational Residential District 1,747.04 Acres - Land Area of Town 12%	
SR – Suburban Residence District. 1,237.57 Acres - Land Area of Town 8%	These are low-density single-family residence districts
UR – Urban Residence District. 171.64 Acres - Land Area of Town 1.2%	
Non-Residential Base Zones	
C – Commercial 97.22 Acres - Land Area of Town 1%	Zone with no minimum parcel area requirements intended nonresidential use such as service and retail businesses and limited multifamily
I – Industrial 428.09 Acres - Land Area of Town 3%	Zone with no minimum parcel area requirements intended nonresidential use such as recreation, light industrial and manufacturing facilities and uses

Pepperell's zoning framework dedicates over 85% of the town's land for homes with 80,000 sq ft lot sizes (approximately 1.8 acres). Only 8.3% of land is zoned Suburban Residence (SR) and 1.2% Urban Residence (UR), where smaller 40,000 square foot lots are permitted. Single-family homes are allowed by right in all residential districts, while two-family dwellings generally require a special permit, and multifamily housing is largely prohibited except by special permit in the Urban



Residence district, the Commercial district, and the Mixed Use Overlay District (MUOD), which comprises only nine (9) acres.

Table 41: Zoning Dimensional & Density Requirements, highlights the performance standards for the Town by zoning district. The minimum lot area requirements in the Rural Residence (RR), Town Residence (TR), and Recreational Residence (RCR) districts require 80,000 square feet (approximately 1.8 acres) per lot, while the Suburban Residence (SR) and Urban Residence (UR) districts require 40,000 square feet (approximately 0.9 acres). These relatively large lot size requirements significantly restrict residential density and make it difficult to produce smaller, more affordable housing types such as compact single-family homes, duplexes, or cottage-style developments. Larger lot sizes also increase land acquisition and infrastructure costs, which can further raise the price of new housing. Finally, these restrictions may discourage more village-like development patterns that would preserve larger tracts of open or agricultural land.

Similarly, the minimum frontage requirements, ranging from 150 to 200 feet in most residential districts, limit the ability to subdivide land efficiently and reduce opportunities for infill development. These frontage standards often require larger parcels to create new buildable lots and can constrain redevelopment opportunities in areas with irregular parcel shapes or existing road layouts.

The setback requirements, including front yards of up to 50 feet and rear yard requirements of up to 75 feet, further reduce the developable area of individual parcels. Combined with the side yard requirements, these dimensional standards limit building footprints and constrain the potential to add additional units or accessory structures on existing lots. While these standards help maintain a low-density, open development pattern, they also limit the feasibility of higher-density housing options including traditional New England village patterns. Although the Open Space Residential Development (explored below) somewhat mitigates this, it would at best create pockets of open space rather than larger tracts with housing clustered near services.

Overall, the dimensional and density requirements in Pepperell's zoning bylaw support a predominantly low-density residential development pattern, but they also create regulatory constraints that may limit the production of diverse housing types and the efficient use of land. As a result, the zoning framework may present challenges for expanding housing supply, particularly for smaller, more affordable, or multifamily housing options and increases the infrastructure costs associated with providing town services.



Table 41: Zoning Dimensional & Density Requirements

Dimensional & Density Requirements	Zoning District							
	Rural Residence (RR)	Town Residence (TR)	Recreational Residence (RCR)	Suburban Residence (SR)	Urban Residence (UR)	Commercial (C)	Industrial (I)	Mixed Use Overlay District (MUOD)
Minimum Lot Area (sf)	80,000	80,000	80,000	40,000	40,000	*		5 acres
Minimum Lot Frontage(ft)	200	150	150	150	150	*		
Minimum Lot Width (ft)	40	40	40	40	40	*		100
Minimum Front Yard (ft)	50	50	50	30	30	*		100
Minimum Side Yard (ft)	30	25	25	15	15	*		30
Minimum Rear Yard (ft)	75	60	60	45	45	*		**
Maximum Building Height (ft)	35	35	35	35	35***	35***		**

* A residential use hereafter located in a Commercial district shall conform to the dimensional requirements of the nearest residential district, except dwelling units above the first floor as allowed in the Commercial district.

** Side Yard and Rear Yard for lots within the Mixed-Use Overlay District are the same as the underlying zoning district.

*** The Planning Board may authorize greater height by Special Permit.

Source: Town of Pepperell Zoning Bylaw, 2014

Permitted Residential Uses

Pepperell's zoning bylaw permits single-family homes by right in all five residential base districts, reinforcing a development pattern centered on detached housing, while prohibiting single-family use in all other zoning districts. Two-family dwellings are allowed by right only in the Urban Residence (UR) district and require a special permit from the Planning Board in the Rural Residence (RR), Town Residence (TR), Recreational Residence (RCR), and Suburban Residence (SR) districts. Multifamily housing (three or more units) is even more limited, permitted only by special permit in the Commercial (C) and Urban Residence (UR) districts. Trailers and mobile home parks are prohibited town wide.

Other housing types are allowed but subject to varying levels of review: dwelling units above the first floor are permitted by right in the Commercial district; assisted living facilities require a special permit from the Planning Board in the RR, TR, RCR, SR, UR, and C districts; and boarding houses



require a special permit from the Board of Selectmen in those same districts. Collectively, these provisions restrict diverse housing types to limited areas and discretionary approval processes, which can constrain housing production, increase development uncertainty, and limit opportunities for smaller or more affordable housing options.

The table below lists all residential uses outlined above, with the approval process related to the underlying base zoning district.

Table 42: Housing Types Permitted by Zoning Districts

Permitted Residential Uses	Rural Residence (RR)	Town Residence (TR)	Recreational Residence (RCR)	Suburban Residence (SR)	Urban Residence (UR)	Commercial (C)	Industrial (I)	Mixed Use Overlay District (MUOD)
Single- Family Dwelling	Y	Y	Y	Y	Y	N	N	N*
Two-Family Dwelling	PB	PB	PB	PB	Y	N	N	N*
Multi-Family Dwelling	N	N	N	N	PB	PB	N	PB
Dwelling unit(s) above first floor	N	N	N	N	N	Y	N	PB
Boarding House	BOS	BOS	BOS	BOS	BOS	BOS	N	N*
Assisted Living Facility	PB	PB	PB	PB	PB	PB	N	N*
Trailer or mobile home park	N	N	N	N	N	N	N	N
Accessory Apartment	BA	BA	BA	BA	BA	BA	BA	BA

* A residential use hereafter located in a Commercial district shall conform to the dimensional requirements of the nearest residential district, except dwelling units above the first floor as allowed in the Commercial district.

BS = Board of Selectmen Special Permit

PB = Planning Board Special Permit

BA = Board of Appeals

Source: Town of Pepperell Zoning Bylaw, 2014



*Zoning District Descriptions***Rural Residence (RR) District**

The Rural Residence (RR) District is the dominant zoning district in the Town, covering approximately 7,066 acres, or 47.6% of the Town's total land area, primarily in the western portion of the community. The district requires a minimum lot size of 80,000 square feet (approximately two acres), along with large frontage and setback requirements that reinforce a low-density development pattern. Single-family homes are permitted by right, while two-family homes may be allowed by special permit; however, multifamily housing is not permitted. As a result, the RR district strongly reinforces large-lot, low-density residential development and limits opportunities for higher-density or diverse housing types.

Town Residence (TR) District

The Town Residence (TR) District covers approximately 424 acres, or 2.9% of the Town's land area, and is generally located in the central and south-central portions of the Town. Similar to the RR district, the TR district requires a minimum lot size of 80,000 square feet (two acres) and includes substantial frontage and setback requirements. Single-family homes are permitted by right, while two-family homes require a special permit, and multifamily housing is not permitted. These standards reinforce traditional single-family residential development and limit the potential for increased residential density or alternative housing types.

Recreational Residence (RCR) District

The Recreational Residence (RCR) District encompasses approximately 1,747 acres, or 11.8% of the Town's land area, primarily in the northeastern portion of the Town. This district also requires two-acre minimum lots (80,000 square feet) and is intended to support low-density residential development associated with seasonal or recreational living environments. Single-family homes are permitted by right, while two-family homes may be allowed by special permit, and multifamily housing is prohibited. As with other large lot districts, these regulations maintain a low-density development pattern and limit the range of housing options that can be developed.

Suburban Residence (SR) District

The Suburban Residence (SR) District covers approximately 1,238 acres, or about 8.3% of the Town's land area, and allows slightly higher residential density than the RR, TR, and RCR districts. The district requires a minimum lot size of 40,000 square feet (approximately one acre). Single-family homes are permitted by right, while two-family homes may be allowed by special permit, and multifamily housing is not permitted. While the SR district allows somewhat smaller lot sizes than other residential districts, development remains predominantly single-family in nature and still reflects a relatively low-density residential pattern.

Urban Residence (UR) District

The Urban Residence (UR) District is the smallest residential zoning district in the Town, covering approximately 172 acres, or about 1.2% of the Town's land area. The district allows a wider variety of housing types than other residential districts, including single-family homes by right, two-family homes by right, and multifamily housing by special permit. The district requires a minimum lot size



of 40,000 square feet (one acre). Because it allows the greatest diversity of housing types, the UR district represents the primary location where multifamily or higher-density residential development could occur; however, its relatively small geographic area limits its overall impact on housing supply.

Commercial (C) District

The Commercial (C) District covers approximately 97 acres, or about 0.7% of the Town's land area, and is intended primarily to support business and commercial activity. Residential development is limited within this district. Single-family and two-family homes are not permitted, but multifamily housing may be allowed by special permit, and dwelling units above the first floor are permitted, allowing for potential mixed-use development. While this district offers some opportunities for housing development through redevelopment or mixed-use projects, the primary focus of the district remains commercial activity.

Industrial (I) District

The Industrial (I) District encompasses approximately 428 acres, or about 2.9% of the Town's land area, and is intended to support industrial and employment-related uses. The district requires large minimum lot sizes of five acres and is oriented toward manufacturing, warehousing, and related industrial activities. Residential uses are not permitted in this district. As a result, land within the Industrial district is reserved exclusively for employment-generating uses and does not contribute to the Town's housing supply.

Mixed Use Overlay District

The Mixed-Use Overlay District allows the Planning Board to issue a Special Permit in the Commercial and Industrial districts on sites of five (5) acres or more. The bylaw is intended to create mixed commercial, residential and open space areas, and to: encourage pedestrian activity by creating a pleasant environment for pedestrians; provide opportunities for retail services, housing and employment in close proximity; and encourage the sharing of parking lots and driveway curb cuts, thereby minimizing the amount of paved parking surface area, and reducing traffic congestion. Currently, the only designated MUOD is the former Pepperell Paper Mill site north of Route 113 on the western bank of the Nashua River. Any MUOD project that results in the creation of ten (10) or more residential units must designate at least 10% of the units as affordable, in accordance with the State's criteria for listing on the subsidized housing inventory (SHI).

Special Permits

The Town's Zoning Bylaw includes several Special Permit provisions that provide flexibility for residential development and allow certain housing types that may not otherwise be permitted by right. These provisions are intended to support housing opportunities for a range of households, including low- and moderate-income residents, seniors, and smaller households, while also promoting open space protection and community character.

Open Space Residential Development (OSRD)

The Town has adopted an Open Space Residential Development (OSRD) bylaw that allows greater flexibility in subdivision design while encouraging the preservation of open space and natural



resources. Under this provision, the Planning Board may grant a Special Permit allowing reduced lot sizes and dimensional requirements in exchange for permanently protected open space.

At least 40 percent of the site must be preserved as open space, and the Planning Board may approve a density bonus of up to 20 percent above the number of units permitted under conventional zoning. OSRD developments require a minimum tract size of five acres in the Suburban Residence (SR) and Urban Residence (UR) districts and ten acres in the Rural Residence (RR), Town Residence (TR), and Recreational Residence (RCR) districts, including parcels within the Water Resource Protection Overlay District. Subdivisions creating five or more lots are generally required to be submitted as OSRD developments, unless the Planning Board determines that site conditions make the approach unsuitable.

Dimensional requirements are reduced compared to conventional subdivisions, with minimum lot sizes generally ranging from 20,000 to 40,000 square feet, depending on the availability of municipal water and sewer service. Limited housing diversity is allowed within OSRD projects, as duplexes or multifamily buildings may account for up to 10 percent of the total number of lots. Additional density bonuses may be granted when projects provide additional affordable housing, preserve additional open space, or incorporate low-impact development (LID) and green infrastructure design techniques.

Planned Unit Development (PUD)

The Zoning Bylaw allows Planned Unit Developments (PUDs) by Special Permit from the Planning Board on parcels of at least 120,000 square feet. PUDs allow a mix of uses and building types within a coordinated development plan. A portion of the site must be reserved as common or open space, and the number of residential units cannot exceed the number otherwise allowed under the underlying zoning district.

Multi-Family Housing

Multi-family housing is allowed in the Urban Residence (UR) and Commercial (C) districts by Special Permit from the Planning Board. Buildings may contain up to four units, with 10,000 square feet of land area required per unit. Units must have a minimum size of 480 square feet, and developments with eight or more units are limited to no more than 20 percent three-bedroom units. Projects proposing six or more detached single-family homes on land designated for multi-family use must provide at least 10 percent affordable units, consistent with state definitions.

Mobile Homes

Mobile homes and trailers are generally not permitted as permanent dwellings within the Town. Temporary occupancy may be allowed for up to six months with approval from the Select Board. Existing mobile homes located within established trailer parks may remain and may be replaced with a new unit that does not exceed 20 percent greater volume than the original structure.



Accessory Apartments/Accessory Dwelling Units

The zoning bylaw was last updated in 2014 and regulates accessory apartments, allowing them in all five residential zoning districts by Special Permit from the Zoning Board of Appeals. These units are intended to provide additional rental opportunities, support aging in place for seniors, and allow homeowners to utilize larger homes more efficiently. The primary dwelling must be owner-occupied, and only one accessory apartment may be permitted per lot. Accessory units must be located within the primary structure and may not exceed 800 square feet.

The Commonwealth of Massachusetts recently enacted a significant update to its zoning framework through the Affordable Homes Act (Chapter 150 of the Acts of 2024), which includes a statewide provision requiring all municipalities to permit accessory dwelling units (ADUs) by right in districts where single-family housing is allowed. Effective February 2, 2025, the law allows property owners to create one ADU on a single-family lot without the need for a special permit or discretionary approval, provided the unit meets basic zoning and building requirements. ADUs may be internal (e.g., basement or attic conversion), attached (e.g., addition), or detached (e.g., backyard cottage), and are limited in size to no more than 900 square feet or half the size of the principal dwelling, whichever is smaller. The law also removes common local restrictions, including owner-occupancy requirements, and limits the ability of municipalities to impose barriers such as excessive parking requirements in certain contexts. While communities retain authority over dimensional standards, siting, and health regulations such as septic capacity, they may not prohibit ADUs outright. This legislation represents a major shift toward expanding small-scale, naturally affordable housing options across the state and provides a streamlined, predictable pathway for homeowners to create additional housing units.

Zoning Conclusion

In summary, Pepperell's zoning framework strongly favors low-density, single-family residential development and offers only limited pathways for the creation of smaller, more diverse, and more affordable housing types. The vast majority of the Town's land area is subject to large minimum lot size, frontage, and setback requirements that constrain residential density, increase development costs, and reduce opportunities for infill or compact neighborhood development. While the bylaw does provide some flexibility through provisions such as Open Space Residential Development, Planned Unit Development, accessory apartments, multifamily housing by special permit, and the Mixed-Use Overlay District, these tools are generally limited in geographic applicability, scale, or are subject to discretionary approval processes that can add uncertainty to housing production. These provisions don't change the overall use of land in town—for example, they don't encourage clustering in villages—and they critically have limited impact on allowing for different housing typologies for a changing population.

As a result, the Town's current zoning structure presents challenges to expanding housing choice and addressing affordability needs, particularly for renters, seniors, younger households, and low- and moderate-income residents. To better support the goals of this Housing Production Plan, Pepperell may wish to consider targeted zoning changes that reduce barriers to a broader range of



housing types, encourage well-designed compact development in appropriate locations, and create clearer, more predictable pathways for the production of affordable and mixed-income housing, ideally by-right. This could be paired with zoning targeted toward preservation of ecologically sensitive or agriculturally productive areas.

INFRASTRUCTURE AND SERVICE LIMITATIONS

This section provides information on the existing sewer, water and transportation infrastructure and identifies the gaps in the infrastructure that present barriers to new residential development. This summary updates the information previously provided in the *2020-2025 Town of Pepperell Housing Production Plan*, the *2020 Master Plan*, and interviews with the Town Administrator and Department of Public Works/Town Engineers.

Sewer Capacity

The Sewer District delineates the portion of the Town where sewer service is currently provided or is planned. This section of the bylaw is also intended to regulate sewer connections and use within the area. Within the Sewer District, all residential or commercial structures constructed after the zoning section's effective date of May 2005 that have legal access to the municipal sewer must connect prior to use or occupancy. All existing single-family residences in the district are allowed access to the municipal sewer system. No other properties outside the Sewer District are entitled to access to the municipal sewer system.

The Sewer Division operates a Grade 6 wastewater treatment facility serving Pepperell and Groton. The Pepperell Wastewater Treatment Plant (WWTP) is an extended aeration type of facility that includes physical, chemical and biological treatment processes. Approximately 1.13 million gallons per day of sewage may be treated at the plant and discharged as effluent to the Nashua River. The collection system consists of 35 miles of sewer in Pepperell and 26 miles of sewer in Groton and transports the wastewater from individual homes and buildings to the treatment plant. The WWTP is located off Rte.111 in the rear of Lomar Park.

The Town's wastewater treatment plant currently operates with significant unused capacity, providing an opportunity for new development without major sewer infrastructure investments. This represents a competitive advantage for the town in attracting responsible development projects.

Water Supply and Protection

Pepperell's public water system has over 3,200 connections and delivers approximately 250 million gallons annually. The water system is classified as a Treatment Grade 1 (1T) and Distribution Grade (2D) and water operators are required to possess professional licenses to operate the system. With the start-up of the new Greensands filtration facility at the Bemis well site, it is expected that the treatment Grade will be upgraded to a Grade II (2T) facility. Drinking water supply is supplied by five gravel-packed wells, which have an average depth of sixty feet. The wells are located at the end of Bemis Road, off Jersey Street and off Emerson Circle, and the town is permitted by MassDEP to pump no more than 1.3 million gallons per day. Pepperell's water system has a storage capacity of 3



million gallons. Two booster pump stations send water from the Heald and Mason Street storage tanks to the Townsend Street storage tank, where pressure is maintained to supply water to the town's higher elevations and for fire protection.

Pepperell's water supply system has sufficient overall capacity to support additional residential and commercial growth. However, the Department of Public Works has identified certain structural limitations within the distribution system. In particular, some of the Town's oldest water mains, located in the eastern portion of Pepperell, are undersized six-inch pipes rather than the recommended eight-inch diameter. These smaller mains may create localized capacity constraints and potential service bottlenecks that could affect the reliability of water service and limit opportunities for new housing development in those areas. Upgrades to this infrastructure could potentially be funded through HousingWorks, MassWorks, or other grant programs in support of community development.

PFAS contamination in local water sources has become an important infrastructure and environmental issue for the Town and has implications for future community development. In response, the Town has undertaken extensive monitoring of its municipal water supply and is advancing solutions to ensure safe drinking water for residents. In 2024, the Water Division initiated pilot testing for PFAS treatment at the Jersey Street Well, evaluating several technologies, to determine the most effective long-term treatment method. The Town is simultaneously designing a PFAS treatment facility at the Jersey Street site and exploring opportunities to improve system operations by relocating Water Division facilities to that location. The Nashua Road Well is operated only as an emergency source at this time, until it is brought into compliance with PFAS limits, which estimates of \$30 million to do so, are a significant obstacle for the Town. Pepperell is also working with the neighboring communities of Groton and Dunstable on a regional approach that could include new water system interconnections and infrastructure improvements. Through these efforts, the Town has secured approximately \$6 million in grant funding and is pursuing additional state financing options to support water system upgrades. Addressing PFAS contamination and ensuring a reliable, safe drinking water supply will remain an important consideration throughout this planning period and beyond.

Transportation Network

While Pepperell is not directly served by a limited-access highway, it has reasonable access to regional transportation corridors. Route 3 can be reached via Routes 111 and 113, while Interstate 495 is accessible via Route 119. The community is served by a multimodal transportation network that includes automobiles, buses, bicycles, and pedestrian facilities.

The Town contains over 87 miles of centerline roadway, including state routes 111, 113, and 119. Approximately 26 miles (30%) of these roads are classified as arterials, which connect the community to the regional highway system. Collector roads, which gather trips from local streets and direct them to arterial routes, account for approximately 3% of centerline miles. The majority of



Pepperell's roadway network, about 59 miles (67%), consists of local roads that primarily serve residential neighborhoods.

Pepperell is located within the Lowell Regional Transit Authority (LRTA) service area, which includes Acton, Billerica, Carlisle, Chelmsford, Dracut, Dunstable, Groton, Lowell, Maynard, Tewksbury, Townsend, Tyngsborough, and Westford. Although Pepperell is part of the LRTA service region, fixed-route bus service is not currently provided within the Town. The Pepperell Council on Aging provides demand-response transportation for seniors within Pepperell and to surrounding communities five days per week. The service requires advance reservations for out-of-town trips.

Regional rail access is available at nearby commuter rail stations. The MBTA Lowell Line provides service between Lowell and Boston from the Gallagher Terminal in Lowell, with 22 daily inbound trains operating between approximately 5:35 A.M. and 12:10 A.M. Peak service runs approximately every 30 minutes, with hourly service during off-peak periods. The MBTA Fitchburg Line is also accessible at the Ayer commuter rail station, with nineteen daily inbound trains to Boston and service approximately every 30 minutes during peak travel periods.

The Nashua River Rail Trail provides a bicycle connection that can be used to access the Ayer commuter rail station, offering a potential automobile-free commuting option. The Rail Trail also provides access to Nashua, NH, with an estimated bicycle ride time of 20 minutes from Railroad Square to the trailhead in Nashua and 40 minutes to job centers in downtown Nashua or along the Daniel Webster Highway. Private intercity bus service to Boston is also available through Boston Express at the MassDOT park-and-ride lot on Route 113 in Tyngsborough, located just east of Route 3.

Pepperell's proximity to regional highways and nearby MBTA commuter rail stations in Lowell and Ayer provides residents with access to employment centers throughout the greater Lowell, Nashua, and Boston metropolitan regions. While the Town itself is primarily automobile-oriented, these regional transportation connections support Pepperell's role as a residential community within Northern Middlesex County and provide opportunities for residents to access jobs, services, and amenities in surrounding municipalities. As the Town evaluates opportunities to expand its housing supply, maintaining safe and efficient roadway access and strengthening multimodal connections will help support new housing development and improve access to regional employment and services.



KEY FINDINGS

MAJOR FINDINGS

The analysis of demographic trends, housing market conditions, and local regulatory frameworks reveals that Pepperell is at a pivotal moment in planning for its future housing needs. While the Town has experienced only modest population growth, significant shifts in age, household composition, and housing affordability are reshaping demand in ways that the current housing stock and zoning framework are not well positioned to meet. At the same time, rising costs, limited housing diversity, and stalled affordable housing production are placing increasing pressure on a wide range of residents, particularly seniors, lower-income households, and first-time homebuyers. Although Pepperell benefits from key assets, including available infrastructure capacity, an Affordable Housing Trust, and adoption of the Community Preservation Act, these resources have not yet been fully aligned into a coordinated housing strategy. The following major findings summarize the key challenges and opportunities facing the Town and provide the foundation for targeted strategies to expand housing choice, improve affordability, and better align local policies with evolving community needs.

Changing Population Requires Changing Housing Types

Pepperell is a community experiencing gradual but important demographic and housing market changes that have significant implications for future housing planning. While population growth has been modest and is expected to slow further over time, the Town's population is aging rapidly and household size is getting smaller, which is anticipated to continue to create modest but consistent housing demand. Growth in older age groups, particularly residents ages 60 to 74 and age 75 and older, is reshaping local housing needs, while younger adult and school-age populations have declined. At the same time, household composition is becoming more diverse, with increases in single-person, single-parent, and other non-traditional households, alongside a decline in average household size. These trends point to a growing need for a wider range of housing options, including smaller units, accessible homes, and housing that better supports seniors, younger households, and residents with disabilities.

Low Housing Affordability Disproportionately Impacts Very Low Income, Seniors Living Alone, and First-time Homebuyers

Although Pepperell remains a relatively affluent community, rising housing costs have increasingly outpaced income growth and reduced affordability for many residents. Median household income has remained high but has not kept pace with inflation or the housing market, and income gains at the upper end of the market mask growing affordability pressures on moderate-income households, renters, younger families, and first-time homebuyers. Home prices have risen sharply over the last decade, lower-cost homes have become increasingly scarce, and renter cost burdens have worsened significantly. Nearly two in five renters are cost burdened, with the most severe impacts felt by extremely low-income households, seniors living alone, and other smaller non-family



households. These trends indicate that housing affordability challenges in Pepperell are broad-based and increasingly affect a range of residents across income levels and household types.

Pepperell's Policy Framework Currently Favors Larger, Less Affordable Homes and Subsidized Housing Development Has Stalled

Pepperell's housing inventory remains limited, with slow growth in overall units, a strong emphasis on owner-occupied housing, and very tight vacancy rates in both the ownership and rental markets. This constrained market leaves few options for renters, lower-income households, and residents seeking smaller or more attainable homes. Affordable housing production has also stalled, with no new additions to the Town's Subsidized Housing Inventory since 2017. At the same time, zoning conditions constrain the Town's ability to respond to these needs. Existing zoning overwhelmingly favors large-lot single-family development, while two-family and multifamily housing are permitted only in limited areas and often require special permits.

Pepperell is Well-Positioned for Additional Achievable Housing Development, but Needs a Coordinated Strategy

Although Pepperell has important infrastructure assets, including available wastewater treatment capacity and adequate overall water supply, constraints related to sewer service geography, undersized water mains, PFAS-related system needs, and limited public transit create additional barriers to housing growth. In addition, Pepperell has the ingredients for a responsible and forward-looking housing strategy, such as an active Affordable Housing Trust, a possible partner in the Pepperell Housing Authority, adoption of the Community Preservation Act, and an engaged planning department. However, those ingredients aren't yet working harmoniously on an integrated strategy. Together, these findings suggest that addressing Pepperell's housing needs will require a coordinated strategy focused on expanding housing choice, improving affordability, supporting infrastructure investment, making targeted and catalytic affordable housing investments, and aligning zoning tools with the Town's changing demographic and economic realities.

COMMUNITY NEEDS ASSESSMENT KEY FINDINGS BY TOPIC

Demographics

- **Population growth is slowing and approaching a long-term plateau.** Pepperell has experienced steady but modest population growth (5.5% from 2010-20) with projections showing slower increases through 2040.
- **Pepperell's population is aging rapidly, with seniors becoming a dominant housing group and the Town does not have the accessible housing stock to support this demand.** Significant growth in older age groups (60–74 and 75+), while younger cohorts (0–19 and 35–44) have declined.
- **Household composition is diversifying, increasing demand for nontraditional and flexible housing.** Nontraditional households, including single-parent and single-person



households, have grown significantly. Average household size has decreased from 2.89 in 2000 to 2.69.

Housing Affordability

- **Younger residents and families face retention challenges, while accessibility needs are growing.** Declines in younger adult cohorts and school-age populations suggest barriers to attracting and retaining younger households. At the same time, 12.6% of residents live with a disability reinforcing the importance of accessible, adaptable, and inclusive housing design.
- **Pepperell has a high median income, but when adjusting for inflation, it is not growing, meaning there is an additional squeeze on renters and more need for affordable housing.** Pepperell's median household income remains high but declined slightly (-0.4%) over the past decade, while state and national incomes rose by 15–17%. Median household income peaked mid-decade and has trended downward since, which may be affected by more residents reaching retirement age. Pepperell's adjusted median income peaked in the 2015–2019 period before declining sharply.
- **Income growth at the top masks affordability pressures after accounting for inflation.** The proportion earning \$200K + grew to more than a quarter of all households. This shift suggests growing challenges for younger households, first-time buyers, and workforce households seeking attainable housing options.
- **Income growth has not kept pace with inflation and the housing market rates.** The cumulative inflation rate was approximately 77%, meaning prices in 2023 are about 1.77 times higher than in 2000.
- **Housing prices have significantly outpaced income growth, reducing affordability.** Between 2014 -2024, inflation-adjusted median single-family home prices increased over 40% (from about \$400K to \$573K)
- **Renters face growing cost burdens while homeowners remain relatively stable.** Nearly two in five renters in Pepperell were cost burdened by 2019–2023, with both moderate & severe renter cost burdens increasing over time highlighting a widening affordability disparity between renters & owners. Cost burdens are most severe among extremely low-& very low-income households. Housing affordability challenges are heavily concentrated among lower-income residents. This underscores a critical need for deeply affordable housing options and targeted affordability strategies.
- **Seniors & non-family households experience the greatest affordability pressures.** Elderly non-family households, particularly seniors living alone, face the highest levels of housing cost burden. Other non-family households show elevated burden rates, reflecting demographic trends toward smaller households & an aging population living on fixed incomes



Housing Inventory & Market

- **Pepperell's housing stock has grown slowly and remains tightly constrained.** Pepperell had approximately 4,588 year-round units in 2020 and an estimated 4,771 units by early 2025, reflecting modest growth over time.
- **The housing market is heavily owner-occupied, with a small rental share.** This ownership-oriented housing pattern mirrors peer suburbs but differs sharply from majority of Greater Lowell region and State, limiting options for renters, younger households, and lower-income residents.
- **Vacancy rates indicate a tight and competitive housing market.** Pepperell's ownership vacancy rate (0.9%) and rental vacancy rate (3.7%) are both below levels considered healthy, signaling limited availability and low turnover.
- **Home values and sale prices have shifted decisively toward higher price points.** Median SFH sale prices rose + 40% since 2014, and the distribution of home values shifted sharply upward. Lower- and moderate-priced homes have all but disappeared.
- **Affordable Housing production is stalled.** The last unit that Pepperell added to its Subsidized Housing Inventory was in 2017.
- **There is a clear mismatch between housing supply and what residents can afford.** The housing stock shows a shortage of lower- and moderately priced homes & lower-rent units, limiting options for first-time buyers, renters & moderate-income households reinforcing affordability challenges across the community.

Affordable Housing Efforts

- **Pepperell recently adopted tools to promote affordable housing development but hasn't used them yet.** In the last HPP period, Pepperell adopted CPA and created an Affordable Housing Trust. Neither have begun making affordable housing investments beyond consulting and legal expenses.
- **Pepperell's Affordable Housing Committee has stopped meeting.** The committee has not met since August 2024 and only has two out of seven members seated.
- **Despite a small capacity, Pepperell has undertaken strong actions.** Pepperell has explored inclusionary zoning, passed several zoning bylaws related to housing including an historic adaptive reuse bylaw, and explored a 40R district. A single planner with volunteer and RPA support has been able to undertake these initiatives.

Zoning

- **Zoning strongly favors low-density single-family development.** More than 85% of Pepperell's land area is zoned for large-lot residential development requiring 80,000-square-foot lots, which limits opportunities for compact, diverse, and lower-cost housing types. Large minimum lot sizes, frontage requirements of 150–200 feet, and substantial setback



standards reduce development yield, limit infill potential, and increase per-unit land and infrastructure costs.

- **Multifamily and two-family housing are highly restricted.** Two-family dwellings are generally allowed only by special permit outside the Urban Residence district, while multifamily housing is limited to the Urban Residence, Commercial, and Mixed Use Overlay districts, mostly by special permit, creating uncertainty and limiting supply.
- **Higher-density housing is allowed in only a very small share of the Town.** The Urban Residence district comprises only about 1.2% of Town land area, and the Mixed Use Overlay District is limited to a single nine-acre site, restricting the locations where more diverse housing can realistically occur.
- **Special permit processes create flexibility but also add uncertainty.** Tools such as OSRD, PUD, accessory apartments, and multifamily special permits provide some opportunities for housing development, but their discretionary nature can lengthen timelines, increase costs, and discourage smaller-scale projects.

Infrastructure

- **Sewer capacity is a relative strength for future housing development.** The wastewater treatment plant has significant unused capacity, allowing the Town to accommodate additional development in sewer-served areas without major new treatment investments. Properties within the Sewer District are entitled to connect to the municipal sewer system, which constrains opportunities for higher-density housing outside those areas.
- **Overall water supply capacity is adequate, but distribution constraints remain.** Pepperell has sufficient overall water system capacity to support additional growth, but undersized six-inch water mains in the eastern portion of Town may create localized service bottlenecks and limit development potential.
- **PFAS contamination is a major long-term infrastructure challenge.** The need for treatment upgrades, well improvements, and compliance investments—particularly at the Jersey Street and Nashua Road well sites—creates significant capital needs that may affect future growth planning and infrastructure priorities.
- **Transportation access is regionally strong but locally limited.** Pepperell has access to regional highways and nearby commuter rail stations, supporting its role as a residential community, but the Town remains largely automobile dependent.
- **Limited local transit reduces housing and mobility options.** Pepperell is within the LRTA service area but does not have fixed-route bus service, which may constrain mobility for seniors, lower-income households, and residents without access to a car.
- **Future housing growth will depend on aligning zoning reform with infrastructure investment.** Expanding housing opportunities in Pepperell will likely require both targeted



zoning changes to allow a broader range of housing types and strategic investment in water, and localized infrastructure upgrades.

- **Pepperell has become significantly more racially and ethnically diverse despite modest population growth.** While Pepperell's total population grew by just 4% since 2000, the racial and ethnic composition changed substantially, but these groups still represent small shares of the total population. Income levels vary by race and ethnicity, but affordability challenges exist across all groups. This underscores that housing affordability is a townwide issue rather than one confined to specific populations.

